

U.S. Department of Energy's EV Everywhere **Workplace Charging Challenge** Mid-Program Review: Employees Plug In



A MESSAGE FROM THE ASSISTANT SECRETARY



Almost three years ago, we kicked off the Workplace Charging Challenge with the goal of having 500 U.S. employers commit to installing workplace plug-in electric vehicle (PEV) charging and joining the Challenge by 2018. I am pleased to share that with more than 250 participants in the Challenge, we are more than halfway there, and the adoption of workplace charging as a sustainable business practice is growing across the country. Thanks to engagement efforts by our internal team, 18 ambassador organizations, our national Clean Cities coalitions, and city and state leaders, the Challenge has expanded its reach in 2015. Now, more than 600 workplaces have installed over 5,500 charging stations that are accessible to nearly one million employees. In addition to our partners, more than 200 other employers also offer

charging, showing how the Challenge has acted as a catalyst for the growth of workplace charging even beyond Challenge participants. In fact, the Challenge welcomed the U.S. Department of Transportation (DOT) as the first federal agency partner this year. The DOT's decision to provide charging access to the federal government's workforce underscores its ongoing commitment to leadership in sustainable and innovative transportation alternatives.

This Program Review takes an unprecedented look at the state of workplace charging in the United States a report made possible by U.S. Department of Energy (Energy Department) leadership and valuable support from our partners as they share their progress in developing robust workplace charging programs.

In 2015, the Energy Department further committed to raising the profile of workplace charging by:

- Establishing the EV Everywhere Utility Partnership by signing a memorandum of understanding with Edison Electric Institute (EEI), which calls upon utilities to promote workplace charging among customers and their own employees
- Promoting the exceptional work of Challenge partners and ambassadors through the Energy Department's social media channels and employer spotlights at workshops across the country
- Recognizing the strong leadership of the Pacific Northwest and welcoming 20 new partners to the Challenge at Drive Oregon's EV Roadmap 8 conference.

To support employers' workplace charging programs, we have:

- Launched a new webinar series to help employers with their workplace charging programs and share experiences among Challenge partners
- Shared technical resources and news through our website and quarterly newsletter
- Collaborated with cities, states, and ambassador organizations to execute workshops aimed at educating employers about the benefits of workplace charging in their communities.

Although 2015 was a year of low gasoline prices averaging \$2.42 per gallon, it is more important than ever to support PEV adoption. With new efforts to limit greenhouse gas (GHG) emissions, PEVs will continue to play a major role in increasing environmental and economic sustainability. This is a prime opportunity to make workplace charging a standard across the country instead of an exception.

We would like to thank our partners and ambassadors who are making the transition to PEVs smoother for employees and boosting America's role in the worldwide electrification revolution. With the momentum built since the launch of the Challenge, we are confident that many more U.S. workplaces will decide to make a difference and join the initiative.

Dr. David Danielson

Assistant Secretary for Energy Efficiency and Renewable Energy U.S. Department of Energy

PLUGGING INTO THE CHALLENGE

In June 2015, the Workplace Charging Challenge distributed a survey¹ to 200 partners with the goal of tracking partners' progress and identifying trends in workplace charging. The 2015 survey responses reflect partners' workplace charging activities between June 2014 and May 2015. A response rate greater than 70% allowed the program to compare it to the 2014 results and highlight how both employers and employees are increasingly valuing workplace charging.

VALUE OF WORKPLACE CHARGING

An innovative employee motivator

According to survey results, employee satisfaction held steady, with 90% of employers indicating that their staff had provided positive feedback on their workplace charging programs. With the addition of workplace charging, PEV-driving employees can nearly double their vehicles' all-electric daily commuting range and feel confident in being able to get where they need to go during and after work.

90% OF PARTNER EMPLOYEES EXPRESS SATISFACTION WITH THEIR WORKSITE'S CHARGING PROGRAM.

Additionally, employees interested in buying a PEV can learn about the benefits of driving electric from their colleagues and may be more likely to consider a PEV, knowing they can conveniently charge up at work.

A valuable tool for reducing oil consumption and greenhouse gas emissions

In the 2015 survey period, partners used an average of 126 kilowatt hours (kWh) per workplace, per day,² at employee charging stations. The respondents who provided both charging station counts and electricity utilization used an average of 9.6 kWh per charging station each day, which is representative of 33 miles of electric vehicle miles traveled by a Nissan Leaf. This electricity reduced about 1.3 million gallons of gasoline and about 13 million pounds of GHG emissions at those workplaces between June 2014 and May 2015. Partners who submitted data for both the 2014 and 2015 surveys reported a 76% year-over-year increase in electricity utilization as a result of increased employee demand.

By extrapolating these benefits to include all partner workplace charging stations in operation by June 2015, the Energy Department estimates partners used approximately 11.8 million kWh of electricity over the course of one year. Based on this estimate, Challenge partners will save a combined 1.7 million gallons of gasoline and 17 million pounds of GHGs each year. This is the equivalent of early workplace charging adopters each removing more than nine average gasoline cars from U.S. roads.³ This catalytic reduction will scale in two dimensions as Challenge partners expand the scope of their efforts and as new partners join the initiative.

A signal of corporate and community leadership

Survey results proved that for a second year in a row, more than half of our partners expanded their PEV promotion activities beyond their own workplaces to help other employers in their workplace charging efforts. Challenge partners are leading change as charging infrastructure leaders in their communities.

> THE NUMBER OF PLANNED AND INSTALLED PARTNER CHARGING STATIONS HAS INCREASED BY 70% SINCE JUNE 2014.

¹ Paperwork Reduction Project (191-5174).

² Average calculation reflects only those survey respondents that provided electricity utilization and is based on 250 annual workdays excluding weekends and holidays.

³ Extrapolation based on the ratio of charging stations at survey respondents' workplaces that reported kilowatt hour (kWh) utilization to charging stations at all workplaces of all survey respondents.



Cumulative Growth in Partner Workplace Locations with Charging Stations

TRENDS

The number of workplaces with charging and the number of stations at those sites is increasing

Partner workplace locations with charging stations increased from 496 in 2014 to 605 in 2015. Further, the number of planned and installed charging stations has increased by 70% since June 2014, demonstrating a growing supply of workplace charging that can provide infrastructure for the increasing number of PEVs purchased by U.S. workers.

PEV ownership is increasing at worksites and across the nation

Challenge partner employees are six times more likely to drive a PEV than the average worker.⁴ In total, employees commuting to Challenge partner workplaces now own more than 9,000 PEVs.



Installed and Planned Partner Charging Stations

⁴ One in 71 partners' employees drive a PEV, while the national average is one in more than 438 employees. Ratio derived from June 2015 cumulative PEV sales ("Light Duty Electric Drive Vehicles Monthly Sales Updates," Argonne National Laboratory, <u>www.anl.gov/energy-systems/project/light-duty-electric-drive-vehicles-monthly-sales-updates</u>) divided by 148,739,000 members of the workforce in June 2015 ("Data Tools," Bureau of Labor Statistics, <u>data.bls.gov/cgi-bin/surveymost</u>).

By driving electric, these employees collectively save four million gallons of gasoline and 50 million pounds of GHG each year—the equivalent of removing more than 5,000 average gasoline cars from U.S. roads. The workplace is often referred to as the "second showroom" for PEVs—a place where

IN 2015, CHALLENGE PARTNER EMPLOYEES WERE SIX TIMES MORE LIKELY TO DRIVE A PEV THAN THE AVERAGE WORKER.

workers can learn about the benefits of PEVs from their peers. Employers' outreach efforts to educate their staff about PEVs is helping more people realize that driving electric can be a practical and attractive vehicle option.

Stations at workplaces are often fully occupied

Employers observed that the occupancy of charging stations was consistent throughout the week. Eighty-five percent of Challenge partners' PEV drivers plug in at worksites where charging stations are occupied five days a week or more.

Partner Charging Stations With and Without Fees Have Similar Occupancy Rates



Based on the station occupancy reported by employers, half of workplaces may need to consider adding more stations to meet employee demand. If adding additional infrastructure is not possible, these employers may want to revisit their charging policy to encourage station sharing. Learn more about employee charging station sharing policies at <u>energy.gov/eere/vehicles/workplace-charging-</u> management-policies-sharing.

Most employers offer free charging

Consistent with 2014 survey results, the majority of partners (80%) provide free PEV charging, compared to 20% who charge their employees a fee. Free employee charging can be a factor in an employee's decision to drive electric. However, survey responses show similar occupancy rates of charging stations at workplaces that provide free charging and those that charge a fee. Additionally, as the number of PEV-driving employees increases, employers may need to consider implementing a fee. If an employer institutes a payment system, it is important to develop a fee structure that is not a major barrier to use. In fact, a fee structure may help relieve charging station congestion. Learn more about employee charging pricing policy at energy.gov/eere/vehicles/workplace-chargingmanagement-policies-pricing.



Workplaces with charging stations are distributed among a number of regions across the country

The map above depicts the geographic reach of the program, extending to most major areas of the country. The size of the circles indicates the number of workplaces offering charging in each zip code. Distribution of charging at workplaces in states like Kansas and Alabama is largely due to the leadership shown there by the electric utility sector.

While employers often do not take advantage of them, the majority of workplace stations have been installed in states with charging infrastructure incentives

For workplace charging installed between June 2014 and May 2015, the majority of stations were solely funded by the employer. However, partner worksites with charging infrastructure are far more likely to be located in states with charging infrastructure incentives than states without access to incentives. Of the nearly 5,000 workplace charging stations installed before June 2015, 94% were installed in states with charging station incentives.

In states with charging station incentives, 58 PEVs are registered for every workplace charging station, compared to 41 registered PEVs for every workplace charging station in states without a charging station incentive. It is likely that workplaces are responding to interest in PEVs from their employees, whose purchase decisions are often influenced by financial incentives such as tax credits for both vehicles and charging stations. In addition, many of these states have also made efforts to promote PEVs and lower barriers to their adoption. Learn more about charging station incentives at <u>energy.gov/eere/</u> <u>eveverywhere/ev-everywhere-tax-credits-and-other-</u> <u>incentives.</u>

Funding Mechanisms Used By Partners to Install Charging Stations from June 2014-2015



PARTNER RECOGNITION

Workplace Charging Challenge partners are leading charging infrastructure deployment in their communities and driving PEV adoption among their staff. To help other employers and to measure the progress of the Challenge, partners share their best practices by publishing profiles on the Challenge website, submitting a workplace charging plan, and completing an annual survey. The Energy Department recognizes the following employers for executing all three of these actions for the first time in 2015.

City of Beaverton

The City of Beaverton, Oregon has a goal to meet 100% of the demand from its PEV-driving employees by 2018 at all major worksites. Beaverton hopes to increase employee use of PEVs as well as add more PEVs to its fleet. Other efforts include adopting consistent signage for charging stations, and supporting PEV-related businesses.

DIRECTV

DIRECTV has installed 24 charging stations for employee vehicles, four of which are solar powered, and will install eight charging stations this year. DIRECTV has reduced its U.S. direct emissions and those from purchased electricity by 16% since 2011 and its indirect (Scope 3) emissions by 7% since 2012.

El Camino Real Charter High School

El Camino Real Charter High School in Los Angeles, California, is integrating sustainability throughout the school, both in the physical campus and the curriculum. The school has installed two charging stations for employees, which also generate data that the school uses in its math and science curriculum.

Florida Power & Light Company

Florida Power & Light Company's 70 charging stations are accessible by fleet, employee, and other PEV drivers as part of a pilot program to assess the impact of workplace charging on the electric system. The company is holding workshops to share its experience and engage businesses and their employees across Florida.

Freudenberg-NOK

Freudenberg-NOK aims to be an innovation leader and is committed to reducing emissions. As a producer of advanced sealing technologies used in PEVs, providing employee charging at its headquarters fits clearly into Freudenberg-NOK's Guiding Principles.

Hewlett Packard (HP)

HP employee commuting accounts for close to 30% of the company's carbon footprint from operations. HP recognizes that a shift to PEV commuting can lower its indirect emissions and help it achieve its carbon reduction goals. In 2014, HP provided employees with more than 70 Level 2 charging outlets. Several worksites offer Level 1 charging and one provides direct-current fast charging (DCFC).

Intel

Intel is committed to being at the forefront of sustainable energy initiatives. The company supports employee electric vehicle use by supplying more than 100 charging stations at eight of its campuses in the United States. It is also piloting a new EV4 ETM Charging Station at its Santa Clara, California headquarters, with smart Intel technology and DCFC capability. Understanding the integration of these types of technologies will help advance the development and support the best solutions for implementation.

JEA

JEA is actively engaged with its community to increase the awareness and education of the benefits of driving electric. Workplace charging allows JEA to demonstrate its leadership and assist its customers with achieving their own workplace charging initiatives.

Kohl's

Kohl's is committed to protecting and conserving the environment by seeking innovative solutions that encourage long-term sustainability. Kohl's provides employee charging at four corporate locations, including its headquarters in Menomonee Falls, Wisconsin, and provides free charging for associates and customers at 83 retail locations across 22 states.

Lane Regional Air Protection Agency (LRAPA)

LRAPA is committed to ensuring clean air for everyone in Lane County, Oregon. By joining the Challenge and promoting the use of PEVs, LRAPA is setting an example in the community. Employees and the public are encouraged to charge their vehicles at LRAPA's office. LRAPA has three Level 2 charging stations.

Legrand

Legrand is committed to sustainability and believes that supporting PEV market growth will reduce its GHG emissions. By providing free access to PEV charging stations installed at its facilities, Legrand aims to provide added refueling confidence to employees considering purchasing PEVs. Legrand has installed seven charging stations to date at its three largest facilities and has allocated charging stations to its other North American facilities, to be installed as demand arises.

Lewis and Clark Community College

Lewis and Clark Community College is committed to reaching campus carbon neutrality by 2058. Lewis & Clark views workplace charging as a key component of reducing commuter emissions. With funds from the student body-approved "Student Green Fee," the college installed two charging stations at the main campus and one at the National Great Rivers Research and Education Center.

National Renewable Energy Laboratory (NREL)

NREL staff use workplace charging stations to help meet federal indirect GHG goals, minimize the lab's environmental footprint, and support its sustainable campus vision. The Energy Department's 1,800-car parking garage at the lab's campus includes 36 charging stations, and enables researchers to test various charging scenarios on the utility electrical distribution network.

Nissan

Nissan offers PEV charging to its employees at its headquarters, regional offices, and vehicle assembly plants, with a significant number of the charging units running off of solar power. Nissan has worked with more than 130 major corporations and universities throughout the United States to encourage the installation of PEV chargers on their campuses.

North Central College

North Central College in Illinois has two charging stations that may be used free of charge by students, faculty, staff, and campus visitors. Committed in its efforts to reduce vehicle emissions, the college hopes its charging stations will encourage a trend toward employee and student use of PEVs on its campus. In addition, the college owns two PEVs that utilize the charging stations.

Pacific Gas & Electric (PG&E)

PG&E employees now have an opportunity to charge PEVs at 16 locations. To date, PG&E has installed 511 workplace charging stations. Future plans include installing approximately 200 charging stations per year over the next five years, with 10% of charging stations designated specifically for employee use. PG&E also offers its employees \$2,000 to purchase a PEV.

Oak Ridge National Laboratory's (ORNL)

ORNL's Sustainable Campus Initiative includes a roadmap for the development of electric vehicle charging stations, indicating that PEV charging is part of a broad sustainability focus for the laboratory. ORNL has 44 charging stations on campus, 25 of which are solar-assisted. At the end of 2014, almost 40 employees were driving PEVs to work at ORNL.

Prairie State College

Prairie State College has made two Level 2 charging stations with three outlets available for employee, student, and community use. As part of the college's PEV initiative, eight parking spots in front of the main entrance were converted to green parking. The school has been working with other community colleges to further charging station and PEV research.

Salt River Project (SRP)

SRP's mission is to encourage greater use of clean energy transportation. As part of this program SRP installed two workplace charging stations in 2010. In response to increasing employee demand, SRP now has more than 90 Level 2 charging stations in total, with 35 of those stations spread across eight facilities dedicated to employee charging.

SAS Institute

SAS Institute assigns top priority to minimizing energy consumption and related emissions from its operations. The SAS Eco-Commuter Parking Program includes 100 designated PEV spaces with access to 48 charging stations. At the beginning of 2015, employees at SAS headquarters in Cary, North Carolina, represented approximately 4% of PEVs in the state.

Sears Holdings

Sears Holdings first installed two charging stations at their corporate campus in 2012, and installed seven more chargers in 2013. The company hosts a PEV group on an internal social media site that allows PEV drivers to notify each other when chargers are full or available, as well as let management know if chargers are malfunctioning.

SolarWorld

SolarWorld's commitment to sustainability is embedded in every aspect of its business and documented in its annual report. SolarWorld installed its first workplace charging station at its U.S. manufacturing headquarters in 2011. It installed its second station, a DCFC, in 2014. SolarWorld has committed to reducing its company-wide GHG emissions 35% by 2020.

Southern Company

Southern Company offers free charging stations for employees at office locations across Georgia, Alabama, Mississippi, and Florida for its four operating units—Georgia Power, Alabama Power, Mississippi Power, and Gulf Power. More than 350 Southern employees drive electric vehicles.

Suffolk County Community College

Suffolk County Community College is the largest community college in New York, with approximately 27,000 students enrolled at three campuses in Selden, Brentwood, and Riverhead. The college has installed four charging stations at each of its three campuses. The charging stations are used by faculty, staff, students, and the general public.

Thomas College

Thomas College is committed to supporting employee and student sustainability efforts. It encourages employees to drive electric by offering designated PEV parking. In 2013, Thomas College installed two Level 1 chargers that are free for employee use. In November of 2015, Thomas College added an additional two Level 2 chargers for student and employee use.

University of Maine

The University of Maine's 100,000 square-foot Advanced Structures and Composites Center was the first LEED-certified building on the campus. As part of the LEED Gold certification awarded for the Offshore Wind Lab expansion, the center is in process of installing four charging stations adjacent to its main entrance with financial support provided by the university's Class of 1944.

University of North Carolina at Pembroke

The University of North Carolina at Pembroke views workplace charging as one of the commuting transportation strategies that supports the campus' sustainability goal of becoming carbon neutral by the year 2050. GHG emissions from the off-campus production of purchased electricity utilized by PEV drivers plugged in to any one of the campus' four charging stations are offset by the four kilowatts of dedicated solar photovoltaic capacity elsewhere on campus—creating a net-zero installation.

PARTNERS

Workplace Charging Challenge partners commit to assessing employee demand for PEV charging at the workplace and developing and executing a plan to provide PEV charging access for employees. As of November 2015, 255 employers have joined as partners in the Challenge.

Education

Appalachian State University Bard College Clarkson University College of Lake County ~ Colorado State University Eastern Connecticut State University Eastern Washington University El Camino Real Charter High School * Georgia Institute of Technology ~ Gonzaga University Harvard University ~* Heartland Community College ~3 Kankakee Community College ~3 Kansas State University * Kaskaskia College ~* Lewis & Clark College Lewis and Clark Community College ³ Louisiana State University North Central College * Northern Illinois University * Oregon State University Owensboro Community and Technical College Pomona College Portland State University Prairie State College ~* Purchase College * Rhode Island College Stanford University Suffolk County Community College ' SUNY Empire State College SUNY New Paltz * Swarthmore College Thomas College * Township High School District 214 University at Albany (SUNY Albany) University at Buffalo University of Alaska Southeast University of California Davis University of California Fullerton University of California Santa Barbara* University of California Los Angeles - Smart Grid Energy Research Center University of Connecticut * University of Hawaii - Hilo University of Louisville ~ University of Maine * University of Massachusetts Lowell

University of North Carolina Pembroke -* University of Pittsburgh University of Rhode Island University of Vermont

State and Local

Atlanta Regional Commission City of Atlanta City of Auburn Hills ~* City of Beaverton ~* City of Benicia City of Fort Collins City of Hillsboro ~* City of Palm Springs * City of Sacramento ~* County of Alameda ~* County of Broward, FL ~* Lane Regional Air Protection Agency~3 State of Illinois State of Oregon Ulster County, NY

Utilities/Energy Companies

Austin Energy * Avista Utilities* **Clark Public Utilities** ComEd Consumers Energy (ConEd) Dominion Resources ~* DTE Energy Duke Energy -Florida Power & Light Company * Great River Energy * Green Mountain Power ~* JEA * Kansas City Power and Light Company Los Angeles Department of Water and Power National Grid New York Power Authority * NYSERDA * NRG Energy Orlando Utilities Commission Pacific Gas & Electric * Pepco Holdinas PJM Interconnection PNM Resources * Portland General Electric PPL Electric Utilities PSE&G (Public Service Electric and Gas Company) Salt River Project * San Diego Gas & Electric * Southern California Edison * Southern Company * TECO Energy Westar Energy *

Wisconsin Public Service Corporation* Xcel Energy *

Other

200 Market Associates 3M ~* ABB ~* Advanced Micro Devices Advocate Health Care AeroVironment ~* American Honda Motor Co.* American Lung Association - Colorado American Spraytech APEI ~* Argonne National Laboratory Atomic Auto AVL~* Bah-Fo Studio Baxter Healthcare Corporation ~' Bayer BECO South Bentley Systems ~* Biogen Idec ~ Black & Veatch Bloomberg LP ~* BMW North America BookFactory ~* Bosch Automotive Service Solutions Brendle Group * Capital One ~* CFV Solar Test Laboratory * ChargePoint ~* Cigna * Cisco ~* Classique Floors * Clipper Creek ~* Concurrent Design ~* Conrad N Hilton Foundation Continental Electrical Construction Company * CravenSpeed Dell ~* DIRECTV * Duro-Last * Eaton Electric Applications * Electric Power Research Institute * Eli Lilly ~ EMC Corporation ~ EMD Serono * Envision Solar * EV4Oregon * **EV Connect** EV Grid **Evolution Marketing** Facebook ~* FCA US ~*

FFV ~ Ford ~* Fraunhofer Center for Sustainable Energy Systems ~ Freedom Solar Freudenberg-NOK * FreeWire Fuji Electric Corp. of America General Electric ~ General Motors ~* Google ~* Green Cab VT Green Wheels Greenlots ~ Hannah Solar Harris Civil Engineers * Hawthorne Auto Clinic Hertz Hewlett-Packard * Hollywood Woodwork * IBEW #48 IDEXX Laboratories * Innova UEV Intel ~* Intertek JLA Public Involvement ~* Kaiser Permanente ~ KEMET Ken's Muffler & Automotive Kia Motors America Kohl's ~* Law Office of Karen Dalglish Seal Lawrence Berkeley National Laboratory ~ Legrand * L eviton Lvnda.com ~* Marshall Auto Body * Mast Collaborative Melink Corp ~* Mentor Graphics ~ MetLife Mitsubishi MOM's Organic Market NASCAR ~* National Renewable Energy Laboratory Neil Kelly Company NetApp ~ Nissan ' Northwest Evaluation Association Oak Ridge National Laboratory * Odell Brewing Company * OpConnect ~ Organic Valley * OSRAM SYLVANIA ~* Owens Corning Paired Power

Pat's Garage Pentair Water Pool and Spa * Phil Haupt Electric ~ Port of Portland Posty Cards Providence Health & Services ~ Puget Sound Solar Raytheon ~* Realty Trust Group Rinehart Motion Systems Rockwood Lithium Rogue Rovers Samsung Electronics ~* SAP ~* SAS Institute ~* Schneider Electric ~* Sears Holdings * SemaConnect ~* Shorepower Technologies ~* Siemens Sierra Nevada ~* SIT World Learning SolarWorld * Spirae * Sprint * Straus Family Creamery * Telefonix Territo Electric Tesla The Coca-Cola Company ~* The Hartford ~* The Venetian and The Palazzo Tube Art Group UL LLC ~* University of Maryland-Baltimore Washington Medical Center ~* Unum U.S. Department of Transportation Utah Paperbox * Utilidata Verizon ~* Vermont Energy Investment Vernier Software Volkswagen Group of America Washington Area New Auto Dealers Association ³ WESCO World Wildlife Fund ~ Zappos ~* Zenith Motors Zero Motorcycles

 partners who completed the survey in 2015
 partners who completed the survey in 2014

AMBASSADORS

The Challenge's success so far would not have occurred without the efforts of the program's ambassadors. Ambassadors are stakeholder organizations that commit to developing and executing a plan to support and promote deployment of workplace charging infrastructure.

Ambassador recruitment of new Challenge partners:

- The Edison Electric Institute (EEI) joined the Energy Department in a partnership to accelerate widespread PEV adoption. As part of this agreement, many EEI member utilities are promoting PEVs among their own employees and helping their commercial customers deploy charging infrastructure at their worksites.
- For the second year, **Drive Oregon** has recruited more new Challenge partners than any other ambassador organization. In July, it recognized 20 new Oregon Workplace Charging Challenge partners at EV Roadmap 8.
- In total, standout ambassadors Advanced Energy, the California Plug-In Electric Vehicle Collaborative, Drive Oregon, EEI, the Electric Drive Transportation Association, the Electrification Coalition, and Plug-In America helped recruit 26 new Challenge partners in 2015.
- Clean Cities Ambassadors, including the Alamo Area, Chicago Area, Greater New Haven, Kansas City Regional, Ocean State, and the Greater Washington Region Clean Cities Coalitions, helped sign up 10 new Challenge partners.

Ambassador-produced workplace charging informational resources:

- Advanced Energy developed nine new support pieces for use by employers and employees who are interested in workplace charging.
- CALSTART developed a workplace charging cost calculator to help employers determine the feasibility of offering workplace charging and released a summary of workplace charging policies and incentives.
- Drive Electric Minnesota has developed resources for Minnesota employers, including a guide to funding sources in the state.
- The **Transportation and Climate Initiative** has developed resources to assist with charging station siting and installation.

Ambassador workplace charging outreach efforts:

- The California Plug-In Electric Vehicle
 Collaborative held Drive the Dream 2015
 with California Governor Jerry Brown to spur
 workplace charging among California employers.
 The Collaborative also held educational webinars
 focused on small businesses and managing
 charging stations at the workplace.
- Clean Fuels Ohio, CALSTART, and the International Parking Institute held workplace charging webinars for employers.
- Through the Center for Sustainable Energy (CSE) Experience Electric – the Better Ride program, CSE held a variety of PEV educational events throughout the San Francisco Bay Area, including at workplaces. Among CSE's partners in conducting these ride-and-drive events is fellow Challenge ambassador Plug In America (PIA). PIA is one of the team members behind National Drive Electric Week, which included events on workplace campuses in 2015.
- Drive Electric Vermont launched DRIVE THE DREAM VERMONT with Vermont Governor Peter Shumlin to recognize the commitments of Vermont employers who pledged to support workplace charging, PEV fleet purchases, and/or employee incentives to purchase PEVs.
- As part of the Drive Electric Northern Colorado partnership, the Electrification Coalition launched a recognition effort for local employers who commit to providing workplace charging. They also held an educational workshop for employers interested in workplace charging.
- Drive Oregon and various Clean Cities Coalitions, including the Lone Star Clean Fuel Alliance, Alamo Area, Dallas-Fort Worth, Houston-Galveston, Chicago Area, Denver Metro, and Virginia coalitions, held workplace charging workshops during the past year.



JOIN THE CHARGE: BECOME A WORKPLACE CHARGING CHALLENGE PARTNER

The Energy Department's Workplace Charging Challenge is open to employers of all sizes and industry types, in all regions of the United States. Taking the Challenge offers benefits to employers who are considering installing PEV charging stations, as well as those who have already launched workplace charging programs. Becoming a partner in the Challenge allows your organization to gain access to informational resources, peer-to-peer networking, one-onone technical assistance, and recognition for your workplace charging efforts. More than 60% of partners surveyed reported receiving recognition for their workplace charging efforts. Survey respondents also noted that they are receiving positive staff feedback, with 90% of partners' employees expressing satisfaction with their workplace charging program. To learn more and join the Challenge, contact WorkplaceCharging@ee.doe.gov.

Sign the Workplace Charging Challenge Pledge

The Energy Department is inviting employers to advance the deployment of PEVs by signing the Workplace Charging Challenge Pledge, a commitment to providing employee charging. Learn more about the Challenge and how to join at <u>energy.gov/eere/vehicles/ev-everywhereworkplace-charging-challenge</u>.





Energy Efficiency & Renewable Energy

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