U.S. Department of Energy

Workplace Charging Challenge

Progress Update 2016: A New Sustainable Commute

Workplace ChargingChallenge
U.S. DEPARTMENT OF ENERGY

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A MESSAGE FROM THE ACTING ASSISTANT SECRETARY

This year, for the first time in nearly four decades, carbon dioxide (CO_2) emissions from transportation exceeded those from the electric power sector. There are several factors that have led to this change, such as cleaner electric power generation and an increase in vehicle miles traveled. According to the U.S. Census Bureau, the number of Americans driving alone to work has increased steadily each decade since 1980 and serves as the commute mode of choice for 3 out of every 4 workers. While sustainable solutions such as public transportation and bicycle commuting are important options, emission reduction solutions for commuters that drive to work must be a top priority.

Plug-in electric vehicles (PEVs) can help replace petroleum fuel with lower-emission electricity. An employee with access to workplace charging is six times more likely than the average worker to drive electric. The U.S. Department of Energy (Energy Department) Workplace Charging Challenge aims to partner with 500 employers who commit to providing their employees with access to charging by 2018. Today, we are more than three-quarters of the way to meeting our goal: as of December 2016, the Challenge has partnered with 400 employers from a wide variety of sectors including utility, healthcare, higher education, commercial, industrial, and local, state, and federal government. Also, this year we proudly partnered with the White House Council on Environmental Quality to launch a successful effort to enable workplace charging at federal facilities across the nation.

When employers join the Challenge, we respond to their technical and management challenges by providing one-on-one assistance, publishing relevant informational resources, and hosting industry expert webinars. In 2016, the Challenge covered topics including:

- Level 1, Level 2 and DC, Fast Charging at the Workplace
- Using Solar Power to Supplement Workplace Charging
- Charging Station Credit for Green Building Certification
- Charging Stations at Leased Facilities
- Level 1 Charging and Safety and Management Policies
- Case studies highlighting workplace charging at higher education campuses, small businesses, and healthcare facilities.

We are proud of our employer partners' success and we leverage the Energy Department's traditional and social media channels to highlight their remarkable efforts.

The PEV market proved strong in 2016, despite another year of low gasoline prices averaging $2.24 per gallon. As of September 2016, there were 500,000 PEVs on the road in the U.S., and the market set new records for monthly sales in each month this summer: June, July, August, and September. The development and production of PEVs is also contributing to the economy—the United States is the largest market for automotive lithium-ion batteries and lithium ion-battery manufacturing has added about $400 million in value to the nation's economy in 2014. Automakers are taking advantage of technology innovations to design lower-priced EVs that are poised to be strong competitors. For example, multiple automakers plan on delivering 200-mile range EVs for less than $40,000 in the 2017 timeframe, significantly increasing the market penetration potential for the next generation of EVs.

On behalf of the Energy Department, I thank our Workplace Charging Challenge partners and ambassadors and look forward to our continued progress together.

David Friedman

Acting Assistant Secretary for Energy Efficiency and Renewable Energy

U.S. Department of Energy

PLUGGING INTO THE CHALLENGE

In June 2016, the Workplace Charging Challenge distributed its third annual survey[1] to 295 partners with the goal of tracking partners' progress and identifying trends in workplace charging. The near-50% response rate[2] reflects partners' workplace charging activities between June 2015 and May 2016.

VALUE OF WORKPLACE CHARGING

Employee Satisfaction

- With workplace charging, PEV-driving employees can nearly double their vehicles' all-electric daily commuting range and feel confident that they can get to where they need to go during and after work.
- Employees 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.

Petroleum & Greenhouse Gas Emissions Reduction[3]

- Challenge partners save a combined **2.4 million gallons of gasoline** and **26 million pounds of greenhouse gas emissions** each year — the equivalent of early workplace charging adopters each removing 10 average cars from U.S. roads.
- By making more charging stations available and supporting more employee PEV ownership, Challenge partners have **saved 50% more greenhouse gas emissions** than last year.

Corporate & Community Leadership

- Challenge partners are acting as sustainable transportation leaders in their communities.
- **50% of partners help other employers** in their workplace charging efforts.

91%
of employers receive positive feedback from staff on their workplace charging programs.

Challenge partners save
2.4
million gallons of gasoline each year.[3]

[1] Paperwork Reduction Project (191-5174).

[2] Information conveyed throughout this report reflects answers from survey respondents unless otherwise noted.

[3] Petroleum and greenhouse gas emissions reduction statistics are estimates based on workplaces that reported electricity usage and extrapolated to all charging stations in use as of June 2016.

GROWTH OF WORKPLACE CHARGING

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

- Partner workplace locations with charging stations **increased 16% from 2015 to 2016 (see Figure 1).**

Partner Workplace Locations with Charging Stations (Cumulative)

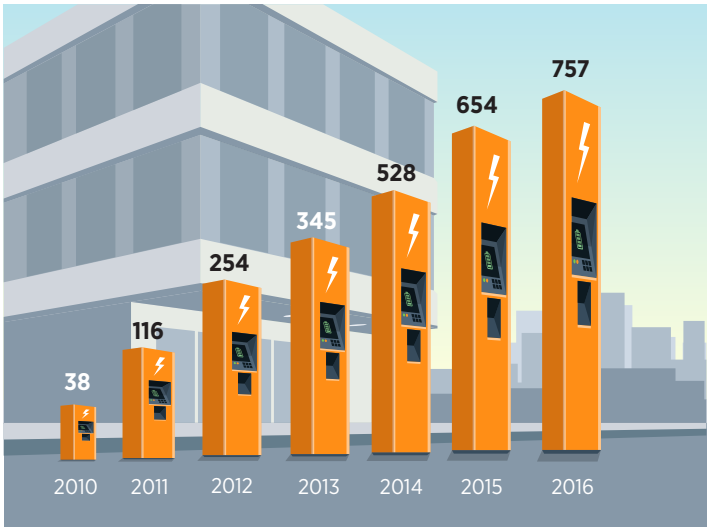


Figure 1. Cumulative number of Challenge partner workplaces with charging stations from 2010 – 2016. *Source: Third Annual Workplace Charging Challenge Survey.*

- The number of planned and installed charging stations among Challenge partners has **increased by nearly 40% since June 2015**, demonstrating a growing supply of workplace charging that can provide infrastructure for the increasing number of PEVs purchased by U.S. workers.
- Workplace Charging Challenge partner employers plan to install nearly **7,500 charging stations (see Figure 2).**
- Partners have **136 installed or planned direct-current fast charging (DCFC) stations**.

Installed and Planned Partner Charging Stations

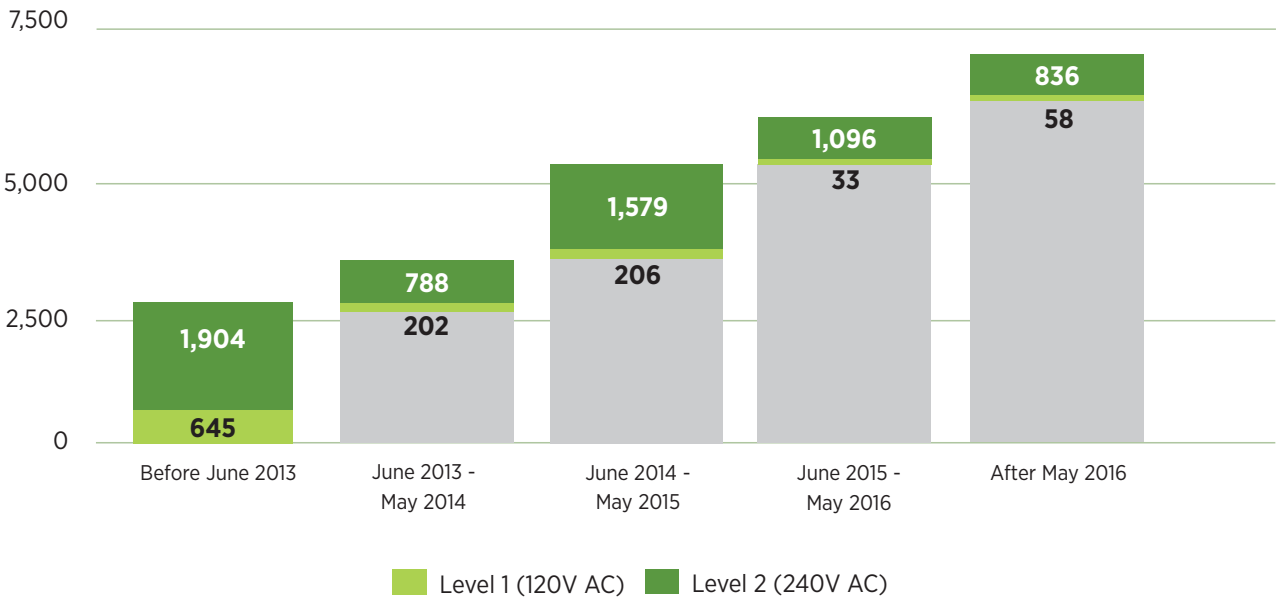


Figure 2. Number and type (Level 1 and Level 2) of installed and planned Challenge partner charging stations added per year and cumulative total. Charging stations are counted once for each outlet available for employee use.
Source: Third Annual Workplace Charging Challenge Survey.

Challenge partner employees are

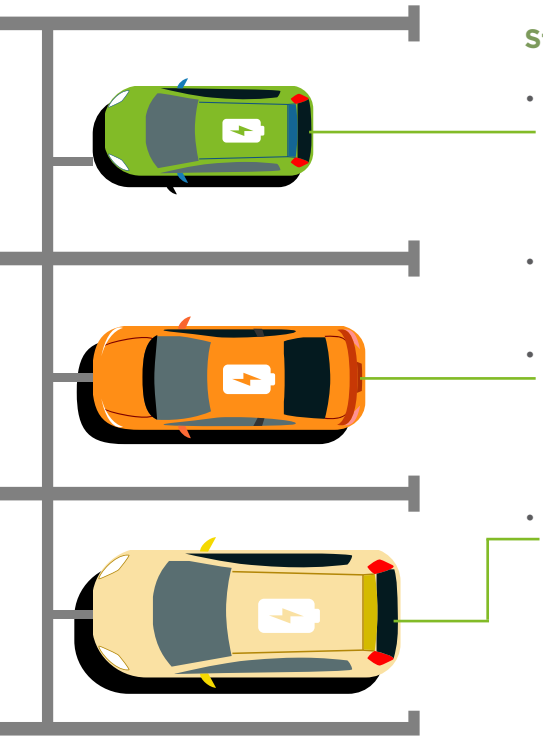
6

times more likely to drive a PEV than the average worker.[4]

Challenge partner workplaces own more than

14,000

PEVs.



Starting small...and growing large

- Many of the partner worksites where more than **20% of employees drive electric are small businesses**. Located in geographically diverse regions, these organizations show that large corporations are not the only employers who take an active role in reducing commuter emissions.
- Over half of partner worksites have five or fewer PEV-drivers and nearly **70% have five or fewer charging stations.**
- More than one in three partner workplaces have available capacity at charging stations to welcome new PEV drivers today. Around **60% of partner workplaces** can accommodate the addition of more PEV drivers if they encourage employees to share charging stations.
- In absolute numbers, **17 partner worksites** have **150 or more employees** who use a PEV to commute to work. These employees mostly work in the technology, automotive, and electric utility sectors.

WORKPLACE CHARGING MANAGEMENT

PEV ownership is increasing at partner employer worksites

- Employees commuting to Challenge **partner workplaces own more than 14,000 PEVs**. If these workplaces were their own state they would have the 6th highest PEV population as of 2015.

Free charging is still offered by most employers

- The majority of partners **(75%) provide free PEV charging**, although the percentage of employers who charge their employees a fee has increased from 20% to 25% in 2016.

Additional energy load is typically manageable

- On average, partners reported that each charging station used by employees consumed 10 kWh of electricity each day. This is less than the energy consumed by four desktop computers and monitors running for a 24-hour period.

[4] One in 56 partners' employees drive a PEV, while the national average is one in more than 324 employees. Ratio derived from June 2016 cumulative PEV sales ("Light Duty Electric Drive Vehicles Monthly Sales Updates," Argonne National Laboratory, *www.anl.gov/energy-systems/project/light-duty-electric-drive-vehicles-monthly-sales-updates*) divided by 151,097,000 members of the workforce in June 2016 ("Data Tools," Bureau of Labor Statistics, *data.bls.gov/cgi-bin/surveymost*).

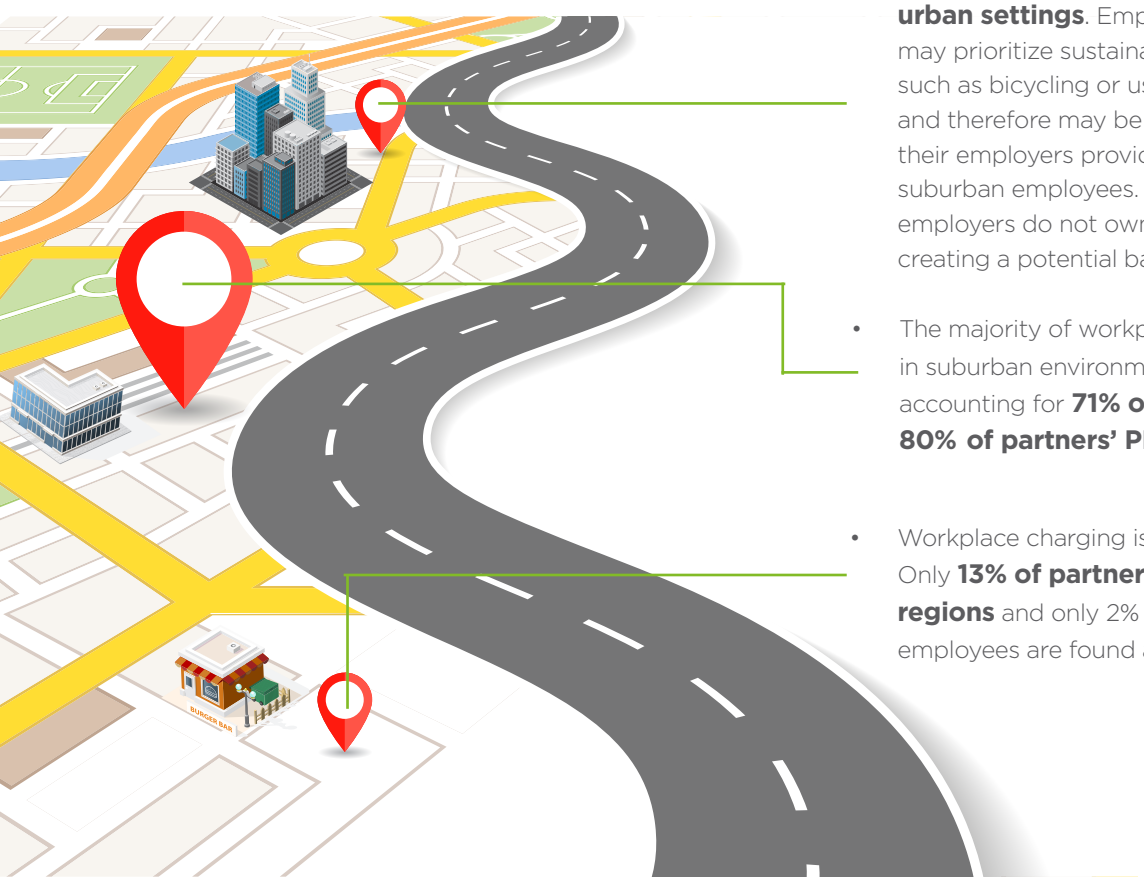
WORKPLACE CHARGING GEOGRAPHIC DISTRIBUTION

Workplace charging is widespread across the country and most common in suburbia

- The Workplace Charging Challenge extends to most major areas of the country and partners are represented in all but five states.
- Many Challenge partners provide workplace charging at multiple worksites across state lines.
- For residents of the top Workplace Charging Challenge metro regions, driving a PEV has become easier with the availability of strong workplace charging programs. In these metro regions, local government leaders are joining forces with industry and Challenge ambassadors including the Energy Department's Clean Cities Coalitions to promote the benefits of driving electric.

Top metro regions for the Workplace Charging Challenge[5]:

1. **Portland, OR**
2. **San Francisco, CA**
3. **Los Angeles, CA**
4. **Atlanta, GA**
5. **Chicago, IL**
6. **San Diego, CA**
7. **New York, NY**
8. **Detroit, MI**
9. **San Jose, CA**
10. **Tampa, FL**
11. **Boston, MA**
12. **Raleigh, NC**
13. **Miami, FL**
14. **Sacramento, CA**
15. **Washington, DC**



- **Less than 20% of partner worksites are in urban settings**. Employees at urban worksites may prioritize sustainable commuting practices such as bicycling or use of public transportation, and therefore may be less likely to request that their employers provide workplace charging than suburban employees. Additionally, many urban employers do not own buildings or parking facilities, creating a potential barrier to workplace charging.
- The majority of workplace charging is located in suburban environments such as office parks, accounting for **71% of partner worksites and 80% of partners' PEV-driving employees**.
- Workplace charging is rarely found in rural locations. Only **13% of partner worksites are in rural regions** and only 2% of partners' PEV-driving employees are found at those locations.

[5] Metro regions with the most Challenge partner worksites offering workplace charging as of June 2016.

PARTNER RECOGNITION

Workplace Charging Challenge partners are acting as sustainable transportation leaders 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 2016:

AeroVironment, Inc.

AeroVironment leads by example with workplace charging strategies. The company has about 20 charging stations, including fast chargers, installed at five of its work locations for employee use. Workplace charging, as well as a rideshare program, allows employees to help meet AeroVironment energy and environmental objectives.

Alliant Energy

Alliant Energy has 13 Level 2 charging stations at its office in Madison, with eight available to its employees and five available to the public as part of a pilot program to support PEV use. Alliant is collecting station usage data and will add more stations as demand grows. The company is also considering adding more charging stations at other worksites.

Argonne National Laboratory

Argonne National Laboratory (ANL) provides its employees with access to charging stations for a nominal fee. Program participants reserve charging time at stations across the campus through an online reservation system. Solar-powered charging stations were installed initially to support the lab's research and fleet vehicles, but ANL is looking to increase employee charging per popular demand.

City of Benicia

The City of Benicia has received grants to install charging stations at city facilities. Through work with local and regional partners, it installed three solar-powered Level 2 charging stations at two city buildings. The City also received a 2015 Environmental Leader Project Award for a dual-port, solar-powered, battery-backed fast charging station. The City plans to install additional Level 2 charging stations at a park-and-ride commuter facility.

City of Fort Collins

As of 2015, the City had 12 public charging stations that are capable of simultaneously charging 25 PEVs. PEV deployment and adoption are a key component of the City's aspirational Climate Action Plan goals. By educating City staff about the benefits of driving electric, the City aims to increase PEV ownership among its employees.

Colorado State University

Colorado State University (CSU) received the first Platinum rating and the highest score ever submitted in the American Association of Sustainability in Higher Education's (AASHE) Sustainability Tracking, Assessment & Rating System (STARS). CSU has 18 charging stations and received grant funding from the Colorado Energy Office to install two dual-port chargers.

Eastern Connecticut State University

As part of its commitment to sustainability, Eastern Connecticut State University installed its first Level 2 charging station in December 2014. The station is available at no cost for university employees, students, and the general public. Eastern was among the first 50 higher education institutions to commit to carbon neutrality in 2007 and continues to be a leader in sustainability.

Eastern Washington University

In 2007, Eastern Washington University accepted the challenge to reduce campus emissions by signing the American Colleges and University Presidents' Climate Commitment (ACUPCC). Installing charging stations in 2016 is one of many efforts that publically demonstrates Eastern's commitment toward sustainability and emissions reduction.

Genentech

Genentech has offered alternative commuting options in the San Francisco Bay Area through its gRide program since 2006. Genentech began installing Level 2 charging stations at its campus in 2014. It added pilot projects for solar- and wind-powered charging in 2015, and installed both Level 2 and DC fast charging stations in 2016 for over 300 PEV driving employees.

Georgia Institute of Technology

In response to high demand by students, faculty, and staff, Georgia Tech has installed eleven dual-port Level 2 charging stations (22 spaces) for campus and public use, and also offers a program to allow campus permit holders that purchase a yearly decal to use 34 Level 1 charging stations in specified locations. The Institute is one of the highest university deployers of PEV charging stations in the southeast.

Heartland Community College

Heartland Community College installed two Level 2 charging stations for employee use. The provision of workplace charging directly supports the college's commitment to sustainability, education, and community partnership.

Intertek CECET

Intertek has more than 30 Level 2 and DC Fast charging stations that employees use for research, and to charge their personal PEVs. By offering workplace charging, Intertek hopes to incentivize employee PEV purchases and increase employee PEV knowledge.

Michigan State University

Michigan State University (MSU) is committed to reducing its carbon footprint by using and promoting clean transportation. As employee demand for charging stations has risen, the university installed five PEV charging stations. In addition to providing resources for PEVs on campus, MSU actively promotes other forms of eco-friendly transportation such as bicycling, public transit, carpooling, and Zipcar.

Odell Brewing Company

Among many sustainable efforts, Odell Brewing installed a dual-port charging station, free for employee and public use. Odell works with the local chapter of Drive Electric Northern Colorado to further workplace charging and PEV adoption internally and around Fort Collins.

Organic Valley

Organic Valley installed a Level 2 dual-port charging station at its headquarters in La Farge, Wisconsin in 2015. Two additional dual-port charging stations were installed in 2016 at its new office building in Cashton, Wisconsin.

Sloan

In addition to Sloan's various sustainability initiatives, its corporate headquarters, located just outside of Chicago, provides four Level 2 charging stations for employees, visitors, and guests to use free of charge. To further promote sustainable transportation, Sloan also designated preferred parking spots for hybrid electric vehicles.

State of New Mexico

The State of New Mexico's energy conservation and management program is coordinated through the state's Energy, Mineral and Natural Resources Department (EMNRD). The State incorporated charging at state-owned properties in 2016. EMNRD hopes to expand the placement and utilization of charging stations at other state-owned properties in the future.

State University of New York at Albany (SUNY Albany)

SUNY Albany has two offices committed to sustainability and alternative transportation. Currently, the University has two dual-port charging stations and is considering the addition of at least one more charging station within the next two years.

U.S. Department of Transportation

As the first Federal agency partner of the Workplace Charging Challenge, the U.S. Department of Transportation (DOT) is committed to promoting sustainable commuting and work-related travel practices for Federal employees, including initiatives that foster workplace charging. Employees working at the DOT headquarters building have access to 50 Level 1 charging stations. DOT is working to expand charging sites across the nation with a goal to provide 500 charging opportunities by 2025.

University of Connecticut

The University of Connecticut installed three charging stations in two locations on campus. These charging stations are free of charge for public and employee use. The University is in the process of installing additional charging stations on campus.

University of Minnesota

The University of Minnesota offers a full suite of transportation services including no-cost charging stations. Consistent with the University of Minnesota's commitment to making improvements in transportation to achieve net-zero carbon emissions, it is currently adding another seven publicly available charging stations to its initial six-station rollout.

Unum Group

After the success of a pilot project in early 2015 of installing four Level 1 charging stations for employee use, Unum added an additional four charging stations to its offerings. Through monitoring the use of these stations, Unum will provide additional charging stations, on an as-needed basis with future plans to introduce Level 2 charging.

World Wildlife Fund

Workplace charging aligns perfectly with the World Wildlife Fund's conservation mission, and its initial eight PEV parking spaces with dedicated Level 1 charging receptacles (110V wall outlets) represent a pilot program for the organization and for sharing best practices with others.

Xcel Energy

Xcel Energy offers charging stations to employees at a number of its facilities. The company also offers options for PEV owners who want to use wind or solar energy to power their vehicles.

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 December 2016, 400 employers have joined the Challenge.[6]

200 Market Associates
3M**
ABB**
Abulous Media
Advanced Micro Devices
Advocate Health Care
AeroVironment***
ALIO Industries
Alliant Energy*
Altenergy Inc
American Electric Power Company (and affiliates)
American Honda Motor Co.*
American Lung Association - Colorado
American Spraytech
APEI**
Appalachian State University
Argonne National Laboratory*
Arkema
Arizona Public Service
Atlanta Regional Commission
Atomic Auto
Austin Energy*
AutoFlex AFV
Avista Utilities*
AVL Powertrain Engineering***
Bah-Fo Studio
Bank of America
Bard College
Bates College
Baxter International**
Bayer
BECO South
Bentley Systems***
Berkshire Hathaway Energy (and affiliates)
Biogen Idec*
Black & Veatch
Bloomberg LP***
BMW North America
Boise State University
BookFactory***
Bosch Automotive Service Solutions
Bounce Milwaukee
Brendle Group*
California State University Fullerton
CALSTART
Caltech
Capital One***
CarCharging – Blink
Cartus Corporation
Centers for Disease Control and Prevention
CFV Solar Test Laboratory*
ChargePoint**
Cigna*
Cisco Systems**
City of Atlanta, GA
City of Auburn Hills, MI**
City of Aurora, CO
City of Beaverton, OR***
City of Benicia, CA*
City of Evanston, IL
City of Fort Collins, CO*
City of Hillsboro, OR***
City of Oakland Public Works
City of Palm Springs, CA*
City of Sacramento, CA**
City of Seattle, WA
Clark Public Utilities
Clarkson University
Classique Floors*
Clean Fuels Ohio
Clean Future
ClipperCreek***
College of Lake County*
Colorado State University*
Colvin Engineering Associates
ComEd
Common Media
Community Medical Centers
Concurrent Design***
Confluence Environmental Center
Connecticut Green Bank
Conrad N Hilton Foundation
Consolidated Edison (and affiliates)
Consumers Energy
Continental Electrical Construction Company*
County of Alameda, CA***
County of Boulder, CO
County of Broward, FL**
County of Riverside, CA
County of Snohomish, WA
County of Sonoma, CA
County of Summit, UT
County of Ulster, NY
CravenSpeed
Dartmouth-Hitchcock Medical Center
Dell**
Delphi Automotive
Delta Products Corporation
Dental TLC
DIRECTV**
Dominion Resources***
Drive Oregon
DTE Energy*
Duke Energy* (and affiliates)
Duro-Last*
E Source
Eastern Connecticut State University*
Eastern Washington University*
Eaton
El Camino Real Charter High School**
Electric Applications*
Electric Power Research Institute*
Eli Lilly*
Elizabethtown College
EMC Corporation*
EMD Serono*
Empire District Electric Company
Envision Solar*
Eugene Water & Electric Board
EV4Oregon*
EV Connect
EV Grid
Eversource Energy
Evolution Marketing
Facebook**
Faraday Future
FCA US***
FEV North America*
Florida Power & Light Company**
Ford**
Fraunhofer Center for Sustainable Energy Systems**
Freedom Solar
FreeWire
Fresh Start Detail Co.
Fresno Yosemite International Airport
Freudenberg - NOK Sealing Technologies**
Fuji Electric Corp. of America
Genentech*
General Electric*
General Motors***
Georgia Institute of Technology***
Georgia Southern University
Gonzaga University
Google***
Great River Energy*
Green Cab VT
Green Mountain College
Green Mountain Power**
Green Wheels
Greenlots*
Hannah Solar
Harris Civil Engineers*
Harvard University**
Hawaiian Electric Industries (and affiliates)
Hawthorne Auto Clinic
Heartland Community College***
Hertz
Hewlett-Packard Company**

[6] Total partner count includes 28 partner electric utility industry affiliates. The number of asterisks corresponds to the number of times the partner completed the Challenge annual survey.

Hofstra University
Hollywood Woodwork*
Hyundai Motor America
IBEW #48
Idaho Power Company
IDEXX Laboratories*
Impossible Foods
Innova UEV
Intel***
Intertek*
JEA**
Jefferson Community College
JLA Public Involvement**
Johnson Controls
Joseph Hughes Construction
Kaiser Permanente*
Kankakee Community College**
Kansas City Power & Light
Kansas State University*
Kaskaskia College**
KEMET
Ken's Automotive
Kia Motors America
Kohl's***
Lane Regional Air Protection Agency***
Law Office of Karen Dalglish Seal
Lawrence Berkeley National Laboratory***
Legrand**
Leviton
Lewis & Clark College*
Lewis and Clark Community College
LinkedIn***
Los Angeles Department of Water and Power
Louisiana State University
Madison Gas and Electric Co
Marshall Auto Body*
Mast Collaborative
Melink Corp.**
Mentor Graphics*
MetLife
Michigan State University*
Mitsubishi
MOM's Organic Market
Morris Energy Consulting
NASCAR**
National Grid
National Institutes of Health
National Life Group
National Renewable Energy Laboratory**
Neil Kelly Co.
NetApp
New York Power Authority*
New York State Department of Environmental Conservation
Nike
Nissan*
North American University
North Central College**
North Coast Electric
Northern Illinois University*
Northwest Evaluation Association
NRG Energy
NYSERDA*
NYU Langone Health System
Oak Ridge National Laboratory**
Odell Brewing Company**
Olympic College
OpConnect*
Oregon State University
Organic Valley**
Orlando Utilities Commission
OSRAM SYLVANIA**
Owens Corning
Owensboro Community and Technical College
Pacific Gas & Electric**
Pacific Northwest National Laboratory
Pacific Power
Paired Power
Paris Autobarn
Pat's Garage
Pentair Water Pool and Spa*
Pepco Holdings
Phil Haupt Electric*
Pine Mountain Sports
PJM Interconnection
Plug In America
Pomona College
Port of Portland
Portland General Electric
Portland State University
Posty Cards
Power Integrations
PPL Electric Utilities
Prairie State College***
Prairie State Generating Company
Providence Health & Services*
PSE&G (Public Service Electric and Gas Company)
Public Service Company of New Mexico (PNM Resources)
Puget Sound Solar
Purchase College, State University of New York*
Raytheon***
RCS Rocket Motor Components
Realty Trust Group
Renewable NRG Systems
ReVision Energy
Rhode Island College
Rinehart Motion Systems
Rockwood Lithium
Rogue Rovers
Salt River Project**
Samsung Electronics***
Sandia National Laboratories, Livermore
San Diego Gas & Electric**
SAP**
SAS Institute***
Schneider Electric***
Sears Holdings Corporation**
SemaConnect**
Shorepower Technologies**
Siemens
Sierra Nevada Brewing Co.**
SL Green Realty
Sloan*
SolarWorld**
Southern Alliance for Clean Energy
Southern California Edison*
Southern Company** (and affiliates)
Southwest Clean Air Agency
Spirae*
Sprint*
Stanford University
State of Illinois
State of New Mexico*
State of Oregon
State of Washington
Straus Family Creamery*
Suffolk County Community College**
SUNY Empire State College
SUNY New Paltz*
Sustainable Future
Swarthmore College
TECO Energy*
Telefonix*
Territo Electric
Tesla
The Bozzuto Group
The Coca-Cola Company***
The Hartford***
The Valley Hospital
The Venetian and The Palazzo
Thomas College**
Thompson School District
Township High School District 214*
Tube Art Group
Tufts Health Plan
UC Davis
UL LLC**
University at Albany (SUNY Albany)*
University at Buffalo (SUNY Buffalo)
University of Alabama Birmingham
University of Alaska Southeast
University of California, Los Angeles - Smart Grid Energy Research Center
University of California, San Francisco
University of California, Santa Barbara*
University of Connecticut**
University of Hawaii at Hilo
University of Louisville
University of Maine**
University of Maryland Baltimore Washington Medical Center***
University of Massachusetts Lowell
University of Minnesota*
University of North Carolina at Pembroke**
University of North Carolina Wilmington
University of Oregon
University of Pittsburgh
University of Rhode Island
University of Vermont
University of Wisconsin, Madison
University of Wisconsin, Oshkosh
University of Wisconsin, Whitewater
Unum Group*
U.S. Department of Commerce
U.S. Department of Energy
U.S. Department of Health & Human Services
U.S. Department of Homeland Security
U.S. Department of State
U.S. Department of Transportation*
U.S. EPA National Vehicle and Fuel Emissions Laboratory
U.S. Food and Drug Administration
U.S. General Services Administration
U.S. Office of Personnel Management
U.S. Patent and Trademark Office
Utah Paperbox*
Utah Valley Hospital
Utilidata
Verdek
Verizon***
Vermont Energy Investment Corp.**
Vernier Software & Technology
Virginia Mason Health System
Vision Ridge Partners
Volkswagen Group of America
Washington Area New Auto Dealers Association*
Washington DC Department of Energy and Environment
WESCO
Westar Energy*
Wisconsin Public Service Corporation*
World Learning
World Wildlife Fund**
Xcel Energy**
Zappos**
Zenith Motors
Zero Motorcycles

AMBASSADORS

The efforts of Challenge Ambassadors played a significant role in the program's success in 2016. Ambassadors are stakeholder organizations that commit to developing and executing a plan to support and promote the deployment of workplace charging infrastructure.

Ambassador recruitment of new Challenge partners:

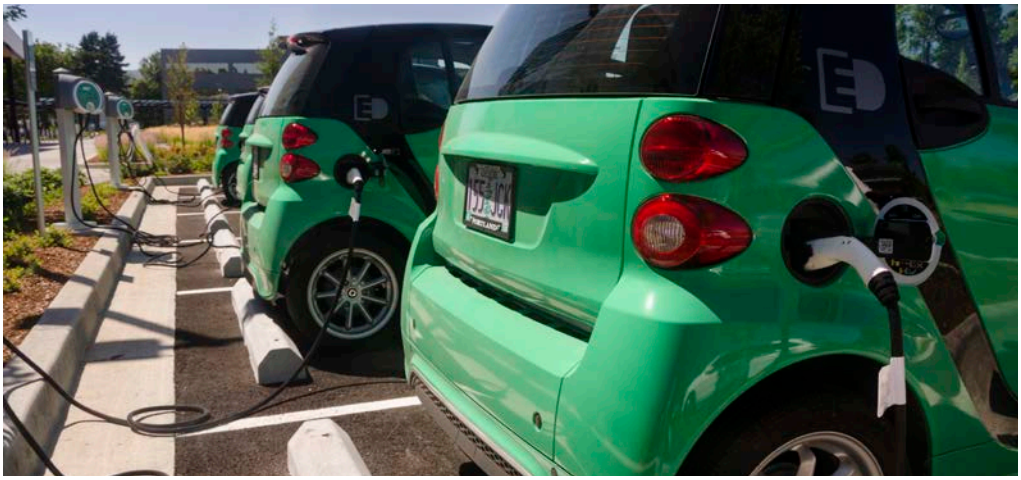
- **Drive Oregon** recruited more than 20 new partners to the Challenge this year, leading ambassador recruitment for three consecutive years.
- **Clean Cities Ambassadors**, including Kentucky Clean Fuels and Louisiana Clean Fuels, Denver Metro, East Bay, Vermont, and Western Washington Clean Cities Coalitions recruited eight new partners this year.
- The **Edison Electric Institute** member utilities continued to show strong support for the Challenge by promoting the initiative among their affiliated companies.

Ambassador workplace charging outreach efforts:

- The **California Plug-In Electric Vehicle Collaborative** provided hundreds of AT&T California employees with the opportunity to experience electric vehicles first hand at ride-and-drive events, as part of the DRIVE THE DREAM Ride and Drive Summer Celebration.
- **Plug In America, Drive Electric Orlando, Drive Oregon, and Advanced Energy** held webinars and workshops for employers to inform them about installing and managing workplace charging programs.

Ambassador-produced workplace charging informational resources, available now on the Challenge website:

- **Drive Oregon, Plug In America, and the California Plug-In Electric Vehicle Collaborative** produced video workplace charging testimonials. The **California PEV Collaborative** also developed a guide to help employers set best practices for installing, sharing, and managing chargers at the workplace.
- **Plug In America** developed a next generation workplace charging guide which covers topics such as how to evaluate available technology choices, how to design a cost-effective charging station cluster, and key features of a workplace charging policy.
- **Drive Oregon** created an infographic to demonstrate how employers benefit when they provide their employees with workplace charging.
- **The Georgetown Climate Initiative** published an issue brief on federal income tax treatment of workplace charging as a fringe benefit.
- The **Edison Electric Institute** developed case studies sharing the workplace charging experiences of two of its members.



The efforts of Challenge Ambassadors played a significant role in the program's success in 2016. *Photo from iStock 97593551*

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-on-one technical assistance, and recognition for your workplace charging efforts. More than 65% 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 *energy.gov/eere/vehicles/ev-everywhere-workplace-charging-challenge*.

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

For more information, visit: *electricvehicles.energy.gov*

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