Workplace Charging Management Policies

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U.S. DOE Workplace Charging Challenge

Goal: Increase the number of employers offering charging by 10x by 2018

190 Partner employers committing to provide EVSE for employees
3,500+ EVSE installed or planned for installation
18 Ambassadors promoting and supporting workplace charging
Ambassadors promote and support workplace charging
NEW REPORT: Overcoming Barriers to Deployment of PEVs

Finding: Charging at workplaces provides an important opportunity to encourage PEV adoption and increase the fraction of miles that are fueled by electricity.

Recommendation: Local governments should engage with and encourage workplaces to consider investments in charging infrastructure and provide information about best practices.
Workplace Charging Challenge Partner Plan

Program Background
Goals and Progress
Demand Assessment
Management & Policy
Procurement & Installation
PEVs/Charging Promotion
Workplace Charging Management & Policy Resources

MANAGING WORKPLACE CHARGING

- **Administration** – Lay the groundwork for a well-managed program by identifying roles and responsibilities across your organization.
- **Registration & Liability** – Help employees get plugged in to workplace charging with a clear and simple sign-up procedure.
- **Pricing** – Learn about the advantages and disadvantages of fee-based and free employee charging.
- **Station Sharing** – Consider tried and true practices that mitigate problems when the number of employee-driven PEVs exceeds charging station availability.

Resources available at: [www.electricvehicles.energy.gov](http://www.electricvehicles.energy.gov)
Workplace Charging Management & Policy Resources

Sample templates and ambassador resource highlights:

- Sample charging agreement
- Sample charging policy
- Policy information guide
- Workplace charging case studies
- Charging pricing guide

Resources available at: www.electricvehicles.energy.gov
Learn More: WorkplaceCharging@ee.doe.gov

www.electricvehicles.energy.gov
Workplace Charging Challenge Partner Speakers

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Today’s Discussion Format

✓ Administration
✓ Registration
✓ Pricing
✓ Sharing
Headquarters
Waltham, MA
Locations with charging
6 – CA, CO, MA, TX, VA
Number of employees
60,000
Number of charging stations
15
Number of PEV driving employees
75
Biggest management challenge
Funding

Photo courtesy Raytheon Company
Headquarters
Cary, NC
Locations with charging
Cary, NC & Sweden
Number of employees
5,377 at Cary HQ
Number of charging stations
52 Global, 42 Cary, NC
Number of PEV driving employees
99
Biggest management challenge
COMMUNICATION

Photo courtesy SAS Institute
Headquarters
Los Angeles, CA
Locations with charging
1 – CA
Number of employees
31,000
Number of charging stations
137
Number of PEV driving employees
~250+
Biggest challenge
Infrastructure cost and cost recovery
What are partners saying about administration?

**Key Players**

Get leadership buy-in on early identification of who:
- establishes and signs off on management policy
- leads communication to employees & the public
- manages ongoing operations & maintenance
- funds procurement, installation & future expansion

**Signage & Access**

Use clear and consistent signage to:
- draw attention to where charging stations are located
- communicate designation for actively charging PEVs
- advise on time or accessibility limitations

**Policy Enforcement**

Ensure that all employees understand:
- who is responsible for enforcing charging policy
- penalties for not adhering to policy
Workplace charging administration

Key Players
- Installation & Management Policy Establishment
  - EHSS and Facilities Partnership
- Operations & Maintenance Facilities
- Funding Facilities

Signage/Access
- **Signage**
  - No standard on signage
- **Hours of Use**
  - First shift from ~7 AM to 7 PM
- **Access**
  - Employees Only

Policy Enforcement
- **Responsible party**
  - Self-policing model
- **Repercussions**
  - None
- **Security**
  - None
Workplace charging administration

Key Players
- Installation & Management Policy Establishment
  Corporate Services
- Operations & Maintenance
  Corporate Services
- Funding
  Corporate Services

Signage/Access
- Signage
- Hours of Use
  Open 24/7
  Limit to 4hr/day
- Access
  Registered Employees & Visitors

Policy Enforcement
- Responsible party
  Security & Employees
- Repercussions
  Yes - Contact Employee and Manager
- Security
  Yes –Routine Patrol
### Key Players

**Installation & Management Policy Establishment**
- UCLA parking, facilities, and faculty

**Operations & Maintenance**
- UCLA electrical, facilities, SMERC

**Funding**
- R&D, Operations

### Signage/Access

**Signage**
- Yes, for some

**Hours of Use**
- Open 24/7

**Access**
- Employees/public

### Policy Enforcement

**Responsible party**
- UCLA parking personnel

**Repercussions**
- Policies are in flux

**Security**
- UCLA parking/security
What are partners saying about registration?

**Registration**

An established registration process can provide:
- certainty of charging demand (number & kind of PEV)
- an opportunity for employee to agree to policy

**Liability**

Liability waivers can be used to:
- stipulate who is responsible for risk associated with charging station usage

**Evaluation**

Periodic review of charging program can:
- determine needs for infrastructure expansion
- allow for management policy revision
Workplace charging registration

Registration
• Registration is required
• Proof of registration: online record

Liability
• Liability waivers are required

Evaluation
• Informal polling
• Depends on capital money availability
• New sites to have charging stations
Workplace charging registration

**Registration**
- Registration is required
- Proof of registration: Eco-Commuter tag

**Liability**
- Liability waivers are not required

**Evaluation**
- Encouraging employee feedback
Workplace charging registration

**Registration**
- Registration is required via WINSmartEV App
- Proof of registration: access to app

**Liability**
- Liability waivers are required

**Evaluation**
- Via cloud-based tracking software/app
What are partners saying about pricing policy?

On deciding between fee or free charging:
- free can be easier to administer and is an additional incentive for employee PEV purchase
- fees can relieve charging station congestion

Pricing

- Employees paid a fee based on usage (i.e., electricity or time) 15%
- Employees did not pay a fee 80%
- Employees paid a fixed fee 5%
Workplace charging pricing

- Fee-based charging

- Fee varies by location
  - $1/hour
  - $1/hour and $0.40 each hour after

- Fee-based due to government reimbursement as DoD contractor
Workplace charging pricing

- Free charging for 4 hours
- Didn’t feel the added cost to charge for using the EVSE was worth the effort
- Best fit for our workplace culture
Workplace charging pricing

- Some EVSE charging is free

- Some EVSE charging is fee-based
  - $2/hour

- Experimenting with different pricing models across campus
What are partners saying about sharing policy?

- Fixed number of charging stations regardless of the number of PEVs: 48%
- More than 1 charging station for every PEV: 8%
- 1 charging station for every PEV: 9%
- Less than 1 charging station for every PEV: 34%

Top ways to manage charging station sharing:
- valet
- station assignment
- reservation system
- time limit
- employee self-management
Workplace charging sharing

- Employee demand is currently met
- Sharing Method: employee self-managed
- Communication Method: email, newsletters, plasma screens, EHSS Council Meetings

Photo courtesy of Raytheon
Workplace charging sharing

- Employee demand is currently met
- Sharing Method: employee self-managed, guided by use policy
- Communication: Online - Green Initiative Site and The Hub (EV enthusiasts group page)

Electric Geese at SAS EVSE
Workplace charging sharing

- Employee demand is not currently met

- Sharing Method: employee self-managed with help of multiplexing technology with WINSmartEV quad charger (photo on right)

- Communication Method: Phone app, quarterly meetings

Photo courtesy of UCLA SMERC
Workplace Charging Management Q&A

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