Plug-in SD Webinar

January 25, 10 - 11 a.m.
Speakers

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Plug-in SD Webinar Agenda

• Helping employees commute to work better and smarter
  – iCommute Employer Program Overview

• Announcements

• Plug-in Electric Vehicles & Workplace Charging
  – Electric vehicles and benefits
  – Incentives
  – Charging Equipment
  – Workplace Charging - Planning & Execution
  – Resources

• Q&A
iCommute

• iCommute is the regional commuter assistance program
  – Encourages transportation alternatives
    • Carpool, vanpool, transit, bike, walk, and teleworking
  – Helps reduce traffic congestion and greenhouse gas emissions
  – A program of SANDAG, the regional planning agency
iCommute Employer Services

• Provide employee surveys and mapping services to identify current commuting behavior and needs
• Create a trip reduction plan for your company
• Hold informational meetings and training sessions onsite
• Provide incentives and marketing materials to stimulate participation
• Offer technical support
• Offer contests, challenges, and regional recognition
iCommute Programs

- SANDAG Vanpool Program – up to $400 per month subsidy
- Try Transit - 30 days to try transit for free
- Guaranteed Ride Home - for the “what if”
- Free bike services – including tune-ups and safety classes
- Monthly prize drawings
Local employers we work with:

- SHARP
- CH2M
- Department of the Navy
- UC San Diego
- Unified Port of San Diego
- Kleinfeld
- Sony
- Watkins
- Solar Turbines
- Sempra Energy
- Illumina
- Qualcomm
- Center for Sustainable Energy
- City of Chula Vista
- University of San Diego
- Component Control
Announcements - Bike to Work Day 2017

• Bike to Work Day 2017 is on **Thursday** not Friday!
  – Thursday, May 18, save-the-date

• Host a Pit Stop
  – New application process
  – Application deadline **March 29**
Next:
Plug-in SD
San Diego Association of Governments serves as a forum for regional decision-making and is the regional transportation planning agency.

Nonprofit organization focused on training, education, outreach, and technical assistance for alternative fuels, renewable energy, energy efficiency, and other sustainable efforts.
Plug-in San Diego

Ensure the San Diego region is ready for plug-in electric vehicles

• Provide information and support electric vehicle and infrastructure adoption
Plug-in Electric Vehicles

**Battery Electric Vehicles**
- All electric, zero-emissions
- 14+ models available
- Examples: Chevrolet Bolt, Nissan LEAF, Tesla Model S

**Plug-in Hybrid Electric Vehicles**
- Electric battery and gasoline
- 12+ models available
- Examples: Prius Prime, Ford C-Max Energi
Growing Number of Available Vehicles

Battery Electric Vehicles
Growing Number of Available Vehicles

Plug-in Hybrid Electric Vehicles
Benefits of Electric Vehicles

- Improves local public health and air quality by reducing tailpipe emissions
- Lower fuel and maintenance costs over vehicle lifetime
- Increases energy independence
Electric Vehicle Incentives

- **Clean Vehicle Rebate Program (CVRP)**
  - Rebates up to $2,500 per purchase or lease of eligible electric vehicles
  - Additional incentive for low and moderate income consumers

- **HOV Lane Access Sticker**

- **Federal Tax Credit (Up to $7,500)**
Growth of the San Diego Market

Total: 13,495

Source: Clean Vehicle Rebate Project, updated January 2017
Charging: Level 1 vs. Level 2

**Level 1**
- 110/120 V
- Adds 4-6 miles/hr
- Used at home & workplace

**Level 2**
- 208/240 V
- Adds 10-24 miles/hr
- Used at SF/MF homes, workplace, public
Charging: DC Fast Charging

- Uses 440 /480 V
- Adds 60 to 80 miles in 20-30 min.
- Used in public and commercial locations due to costs
Where do EV drivers plug-in?

The majority of charging occurs at home, next at workplaces, and lastly in public.

Source: New York State Energy Research and Development Authority
Public Charging

- 400+ charging locations in the SD region (with 1,000 plug-in points)
- 20,000+ electric vehicles in the region
- Locate chargers at www.plugshare.com

Source: SANDAG InfoBits (April 2016)
Workplace Charging
Importance of Workplace Charging

40% surveyed said workplace charging is important when purchasing an EV

Source: Clean Vehicle Rebate EV Consumer Survey Dashboard
Benefits of Workplace Charging

- Support the growing EV market
- Green your image
- Improve daily commutes
  - Access to the carpool lane reduces driving time and stress
Steps to Installing Chargers

1) Research Options and Develop a Plan

- Survey employee demand
- Gain internal support
- Is parking available?
- Evaluate electrical capacity
Steps to Installing Chargers

2) Choose Appropriate System and Assess Costs

- How many chargers?
- Type of charger?
- Installation costs
Steps to Installing Chargers

3) Utilize Installation Checklist

- Work with electrician
- Conduct site assessment
- Acquire permits
Steps to Installing Chargers

4) Operate, Maintain and Monitor Use

- Understand usage
- Plan for future growth
- Establish internal policies
# Workplace Charging Considerations

### Siting
- Number of Chargers
- Parking Availability
- Location
- Electrical Capacity

### Level of Access
- Employee Use (Private)
- Combine with fleet use
- Registration required (Public)
- Open Public

### Payment and Usage Options
- $/h, $kWh
- Flat monthly rate
- Free
- Time Limit
- Etiquette

### Future Plans
- Expansion
- Maintenance
- System Optimization

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*Technical Assistance for Workplaces through Plug-in SD EV Expert*

- **Email** [EVexpert@energycenter.org](mailto:EVexpert@energycenter.org)
- **Phone** (866) 967-5816

*Considerations listed above can be explained in further detail, refer to resources from the PEV Collaborative*
Resources and Funding Programs
San Diego Gas & Electric’s pilot program to install 3,500 EV charging stations in SD service area sites.

Join SDG&E’s interest list at www.sdge.com/poweryourdrive
Volkswagen’s Electrify America Program

Volkswagen is funding Level 2 or DC Fast Chargers.

Submit proposals at:
https://www.electrifyamerica.com/proposal

Future funding may be available through state and public agencies.

Source: Electrify America
Workplace Charging Resources

- **Best Practices for Workplace Charging**
  Employer EV Initiative
  Supporting solutions for workplace charging

- **San Diego Regional Plug-in Electric Vehicle (PEV) Readiness Plan**
  Preparing the San Diego Region for Plug-in Electric Vehicles
  January 2014
  SANDAG + Cal State University + San Diego Gas & Electric

- **Plugging in at Work**
  How to Effectively Install, Share and Manage Electric Vehicle Charging Stations
  November 2015

Get your workplace CHARGED UP!
Other Resources

Clean Vehicle Rebate Project
https://cleanvehiclerebate.org

Clean Technology Vehicle Buying Guide
http://www.driveclean.ca.gov/

Plug-in San Diego EV Expert & FAQs
http://energycenter.org/pluginsd
Questions?
Thank you!

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