Models for Promoting Electric Vehicle Infrastructure Within Your Community

Speakers:

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LADWP’s EV Charging Initiatives,
Webinar: "Models for Promoting Electric Vehicles within Your Community"
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DWP’s EV Charger Program

Why We Encourage Electric Vehicles (EVs)…

➢ Promote a green environment.  (75% less GHG than gas).
➢ Promote customer efficiency
  (less than $1 per gallon of gas)
➢ Build a new industry for jobs.
➢ Integration of renewable.
➢ Local green energy
➢ Better use of utility assets.
EV Charging Initiatives

- Education & Outreach: Community Events, Upgraded LADWP Web Site – [www.ladwp.com/EV](http://www.ladwp.com/EV)
- Collaboration: Working with SCE and other municipal utilities through SCPPA to address customer needs for infrastructure, public information, Time-Of-Use rates and related matters.
- Assistance: Call Center Staff, Electric Service Reps, code experts
- Rates: EV Discounts
- Streamlined Permitting
- Infrastructure: Municipal and Customer
Municipal Charging

- Growing the City’s EV Fleet with 63 of various types deployed.
- Retrofitted 207 legacy chargers to the new standards on City Property. Includes LADWP, City Hall, the Convention Center, LAX, City Parking Structures. More in progress.
- Installing 16 DC Fast Chargers in and around LA.
- Grants for workplace and fleet charging.
Recent Accomplishments:

- Wrapped up our EV residential rebate program. Provided over $1,700,000 to over 900 LA customers.
- Encouraged business customers to take advantage of grant funding opportunities for EV charging.
Charge-Up LA! – Home, Work, and On the Go

Residential Charging:

- Up to $750 for purchase of a Level 2 charger
- Optional $250 credit toward electricity for many months of cost free driving if they do the separate TOU metering.

Home Charging: 89% charging of which 80% off peak.
Vehicle more convenient & available = more zero emission miles.
3 New Rebates - Workplace

Charge-Up LA! – Home, Work, and On the Go

Workplace Charging:

➢ Target Large Employers
  (comply with SCAQMD Rideshare Rule 2202)
➢ Up to $750 for purchase of a Level 2 charger wall mount
➢ Up to $1000 for purchase of a Level 2 pedestal charger
➢ Max 20 chargers per premises.
➢ Can trade 20 chargers for DC Fast Charger

Workplace Charging: Assists with compliance. More zero emission miles, encourages vehicle sales.
3 New Rebates – Public Charging

Charge-Up LA! – Home, Work, and On the Go

Public Charging:

➤ Target Commercial Customer that provide charging for the public.
➤ Same rebates as Workplace Charging rebate
➤ Max 20 chargers per premises.
➤ Can trade 20 chargers for DC Fast Charger

Public Charging: Provides confidence to EV drivers. Provides range extension, partial solution for multi-family dwellers. Positive business model (green, longer shopping, etc).


**DOE Smart Grid Demo**

pays for half of:

- City Charger Retrofits
- Charge-up LA! Home Rebates
- 16 DC Fast Chargers
- Fleet Chargers installed at LADWP
- 68 EVs for LADWP’s fleet.
Role of Grants

**Grants toward:**

- 32 LADWP fleet chargers ($75K)
- 32 LADWP workplace chargers ($75K)
- Additional City Chargers ($250K)

These grants typically pay for half of the cost of installation.

- Grants for CNG Trucks reinvested in New EV Customer Rebates
- Pending 3 new CEC grant proposals.
Advantage of Multiple Incentives

Low Cost DC Fast Chargers: LADWP Customers

Costs & Incentives

1. Installation Cost =
   Charger Unit + Materials + Labor
   - $40,000

2. Federal Infrastructure Tax Credit
   (Expires 12/31/2013)
   - -$7,500

3. LADWP Rebate
   - -$15,000

4. Nissan Incentive
   - -$15,000

Net Cost to Site Host

Savings

Example

$2,500
94%

1. Installation costs vary.
2. 30% of installation cost up to $30,000.
   See page 8 for details.
3. See page 6 for details.
4. Nissan incentives subject to availability.
Lessons Learned

- **Maintenance:** Occasional charger failure (2% annually). Have your maintenance strategy worked out / Warranties.

- **Workplace Charging:** Growing pains, need to work out business model for each business (pay/free, moving rules, level 1 or 2) Be ready to grow...Catch up game.

- **Costs:** Building the infrastructure is the high cost. Electricity is the cheap part. Leverage your grants.

- **Smart Charging or Dumb Charging:** Depends on business model. Free, paid, or other. Cost difference is substantial. DWP uses dumb chargers with a free model with utility smart meters.
**Outreach:**
- Employee / City Events – EV take home
- EV social media – emails, EV club, etc.

**Policy:** City Policy on EV Infrastructure – in the works.

**Business:** Favorable SCAQMD rideshare compliance measures.

**Promotion:** Outreach for Rebate Programs
- LA Green Building Code follow-up for new construction.
- Streamline process with OEM dealers to order EV chargers for home and work when the vehicle is purchased. Finance w/ car.
- Workplace charging follow-up.
- Recognition Awards for workplace charging.
• Question: What strategies can be done to encourage EV Taxis?

Shenzen
China

London:
Taxi Answer (per BYD)

- Technical: Need either a very dense (populated) area or an EV with longer range.
- Financial model with quick payback for the vehicles.
- Strategic location of chargers, start small.
- Most Important: Priority queue locations at airports
Questions?

www.ladwp.com/ev
EV Infrastructure Grant Funding:
• ARRA Stimulus Funding
• Western WA Clean Cities
• ChargePoint
Bellevue City Owned Stations
www.mychargepoint.net
Bellevue Community Owned Stations
www.plugshare.com
How much gasoline have we saved?

- Oct: 500 gallons
- Nov: 500 gallons
- Dec: 500 gallons
- Jan: 750 gallons
- Feb: 500 gallons
- Mar: 0 gallons

System Notice: A major upgrade to the Driver Portal occurred on Feb 1. See the Release Notes for a summary of the great new features, and for important policy changes regarding Sign Up.
EV Infrastructure Lessons Learned:

• Siting
  – Proximity to electricity
  – Regional destinations

• Working with partners
  – Streamlined permitting
  – Regionalism

• Trusting the markets
  – Nissan, Tesla dealerships
  – Early adopter population
EV Infrastructure Next Steps:

• Fee for charging
  – $.50/hr vs. $2.00/hr
  – Self sustaining model

• Parking enforcement
  – Signage & striping

• Maintenance
  – Vandalism a non-issue
  – Moving station locations

• More promotion and use!!
Bellefield Office Park Receives New EV Fast Charger

Talon Portfolio Services and Urban Renaissance Property Company announced the addition of four "level two" electric vehicle (EV) charging ports and one "DC Fast Charger" to the Bellefield Office Park in Bellevue.
GreenWA.org is an interactive website showcasing Bellevue, Washington's leadership and resources for more sustainable living.

Use the available maps, videos, and knowledge contained within to learn about the ecosystems, community, and infrastructure that enables residents and visitors to enjoy resourceful lifestyles and healthy living.
Electric Vehicles by the Numbers:

- **$3,600** – Annual gas savings from 1 Bellevue EV commuter
- **9,000+** – Gallons of gasoline saved from City-operated stations alone
- **22** – Number of COB operated charging stations
Bellevue Fleet by the Numbers:

- **30,000** - avoided gallons of gas savings per year
- **$100,000** - avoided cost savings per year
- **35%** - hybrids as a percent of light-duty vehicle fleet
Thank you

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Questions?

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