

# Work Group: Next Generation Deployment Strategy

**TEEC Chair:** Charlie Allcock

**TEEC Members:** Duncan Wyse, Thomas Brookes, Betsy Boyd, Lynn Peterson

**Task Leads:** John MacArthur, Art James, and Ashley Horvat

**Meeting Support:** *TBD*

**Intern:** *TBD*

## Background

This work group will focus on developing innovative next-generation deployment strategies, such as integrating existing efforts into a statewide EVSE network; determining key gaps in EVSE coverage; planning for connection to other PEV corridors including the Green Highway and NW Oregon Charging Network project; identifying community nodes for staged development of infrastructure; workplace charging; multi-family housing charging; services beyond passenger cars and light-duty trucks, such as taxis, urban freight and ecotourism; infrastructure to serve daily commuters, captive fleet, and long distance travelers; EVSE connectivity between rural and urban communities; and impacts to the grid including from on-peak charging. The work group will develop the next-deployment strategy for the state by employing a two-pronged approach. The two “prongs” are “*PEV Deployment*” and “*Infrastructure Planning*,” which are the focus areas that will work together to create an actionable next-generation deployment strategy.

The group’s work will address plan elements 4 and 5 from US DOE’s funding opportunity announcement. A brief description of each element is as follows:

- **Plan element 4:** Current plans for plug-in electric drive vehicle deployment in the area/region covered by the plan.
- **Plan element 5:** A plan for deploying residential, workplace, private, and publicly available charging infrastructure.

## Schedule

First meeting = November/December 2011

Sub-committee meetings (conference calls) = Monthly January thru June (12 meetings)

“All hands on deck” work group meetings = Every other month January thru June (3 meetings)

Final meeting = July

*Total # of meetings/conference calls = 17*

## Tasks

Task # 1: Establish a core group (out of the entire work group that will lead the coordination of work) and sub-committees.

Task # 2: Decide on exact scope for group’s work related to two prongs – #1: PEV Deployment and #2: Infrastructure Planning.

Create a list of data and research needs for prong # 1 and prong # 2 that the work group deems necessary and desired for a contracted firm to analyze. The analysis of the contracted firm will be utilized in determining feasible and actionable items that can be incorporated into the final next-deployment strategy. The following are potential items the group could consider.

- 1) **Prong # 1: PEV Deployment.** *Potential items for the firm to review in the analysis:*
  - Conduct a landscape review of the PEV market in Oregon, including current sales and future projections (also, evaluate these to determine the future projections' accuracy)
  - Number of PEVs privately owned fleet or public fleet vehicles<sup>1</sup>
  - Vehicle usage patterns
  - Determine barriers, opportunities and strategies to support PEV deployment (could be done with the help of a separate survey of likely PEV communities, or could capitalize on work done in the outreach and marketing group to support this research)<sup>2</sup>
  - Produce a list of opportunities for specific deployment projects
  
- 2) **Prong # 2: Infrastructure Planning.** *Potential items for the firm to review:*

Conduct landscape review of Oregon's current infrastructure and future projections on (taking into account all ongoing and known future PEV infrastructure projects):

  - Residential (single-family) charging
  - Residential (multi-family) charging
  - Workplace charging
  - Publicly and privately owned charging stations available to the public
  - Fleet infrastructure (federal, state, local, private companies, etc.)
  - Regional mobility (Oregon and Washington fast charging network)
  - Other...

Task # 3: Issue a Request for Proposals (RFP) for a firm to conduct analysis.

Task # 4: Take the analysis conducted by contracted firm to develop a comprehensive next-deployment strategy, including prong # 1: PEV Deployment and prong # 2: Infrastructure Planning.

#### ***Task # 4 Sub-tasks***

- 1) Come to a consensus as a group on which of the opportunities highlighted by the firm (as well as potential opportunities not highlighted by the firm, but possibly vital to deployment based on group members' expertise) have the most potential to be acted upon as soon as possible with the biggest impact both at the state and national level. The group will take market, political and regional conditions into consideration when determining if an opportunity is "actionable."
- 2) Produce prong # 1: PEV Deployment Strategy (*potential items below*)
  - Determine strategies to accelerate deployment in specific areas based on the group's decision on implementable opportunities
  - Discuss barriers, opportunities and strategies to support infrastructure deployment
  - Highlight opportunities for innovative deployment projects

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<sup>1</sup> Could link back to WG3 for their utilization

<sup>2</sup> Link to WG2 and WG3

- 3) Produce prong # 2: Infrastructure Planning Strategy (*potential items below*)
  - Determine strategies to accelerate infrastructure development in specific market segments and locations
  - Plan to solve PEV-related infrastructure issues at multi-family residential buildings
  - Evaluate potential deployment costs and cost to consumers
  - Discuss barriers, opportunities and strategies to support infrastructure deployment
  - Highlight opportunities for innovative deployment projects
  - Determine how data collection (past and ongoing) can be utilized by communities and private entities in making deployment decisions
  - Discuss how to link with smart grid technologies<sup>3</sup>

**Budget (tentative – to be used to support contractor identified through RFP)**

original amount allocated .....\$35,000  
 add-in funds.....\$5,000

**Outcomes and deliverables**

- Develop a next generation deployment strategy, including PEV deployment projections and infrastructure plans
- Determine barriers and opportunities
- Determine best practices, strategies, policies, and inducements to support the overall strategy plan

**Next Steps**

- 1) Schedule meeting 1
- 2) Meeting 1 (late October/early November):
  - Identify core group and subcommittees
  - Define exact scope of group’s work
  - Determine data and research needs
  - Determine actions for partners and subcommittees
- 3) Issue RFP for contractor support

**Identified Work Group Members**

**Core team members**

Art James, ODOT  
 Ashley Horvat, ODOT  
 John MacArthur, OTREC  
 Mark Brady, Business Oregon

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<sup>3</sup> Link to WG4

## ***Members from Commitment Letters***

### **OEMs:**

Nissan, Tracy Woodward  
Toyota, Jana Hartline  
Mitsubishi, John Nakamoto  
General Motors, George Bellino  
Ford, Barbara Rodgers  
Freightliner Custom Chassis, Michael Stark  
Azure Dynamics, Chris Abarca

### **EVSE Manufacturers:**

Eaton, Doug Bogen  
AeroVironment, Kristen Helsel  
ECOTALITY, Dan Bates  
Shorepower Technologies, Jeff Kim  
Nichicon, Michito Igarashi  
Coulomb Technologies, Richard Lowenthal  
Mitsubishi Heavy Industries, Yuri Fujiwara  
General Electric, David Wang

### **Supporting Technologies:**

Kanematsu, KJ Ando  
Inspec Group, Doug Smith  
NEC Corporation, Maiko Ueda

### **Auto Dealers:**

Oregon Auto Dealers Association

### **Research Institutions/Training/Advocacy Organizations:**

IBEW, Mike Dutton  
NECA  
Rocky Mountain Institute, Ben Holland  
Drive Oregon, Tim Miller

### **Travel Industry:**

Oregon Travel Information Council, Jim Renner  
AAA Oregon, Jennifer Clugston  
Enterprise Holdings, Sabrina Rokovitz  
Zipcar, Jeremy Nelson

### **City, County, Local Governments:**

Clean Cities Coalition - Rogue Valley  
City of Portland  
Association of Oregon Counties, Emily Ackland  
Metro, Deena Platman  
Clark County  
City of Eugene, Jeff Petry  
Springfield, Rice  
Jackson County  
League of Oregon Cities, Craig Honeyman

### **Utilities:**

PacifiCorp, Pat Egan  
Portland General Electric, Charlie Allcock  
Northern Wasco, Paul Norman  
Bonneville Power Administration, Scott Simms

### **State Agencies:**

ODOT, Art James  
ODOE, Rick Wallace  
Building Codes Division, Gabrielle Schiffer

### **Potential Additional Partners:**

Travel Oregon  
Pike Research