NEW APPROACHES TO FINANCING THE PUBLICLY AVAILABLE ELECTRIC VEHICLE CHARGING NETWORK

The third meeting of the Advisory Panel and C2ES

October 1, 2014 10:00 a.m. – 3:00 p.m. Doubletree Hotel 415 Capitol Way N Olympia, WA 98501

The purpose of this workshop is to assess the effectiveness of various business concepts at financing publicly available charging infrastructure in the state of Washington. The workshop will begin with an opening plenary session based on a simple business model for publicly available charging that Washington state has already explored. Following the plenary session, each workshop participant will be assigned to one of three breakout groups. Each group will explore three types of electric vehicle (EV) charging infrastructure gaps, and discuss alternative ways to finance charging stations. The charging gaps will be drawn from cases in the Task 1 report from this study, *Assessing the Electric Vehicle Charging Network in Washington State*.

10:00 a.m. Welcome and Introductions

10:15 a.m. Plenary: The Business Challenge of a Publicly Available EV Charging Network Janet Peace, C2ES

C2ES will present the basic financing problem that exists with a publicly available EV charging network: revenue does not easily exceed costs. We will use a simple model to illustrate the challenges with publicly available charging and identify various approaches (the "toolbox") to addresses these challenges. The group will discuss how each tool may or may not solve the basic financing problem.

C2ES will also review the breakout group process and provide time to review the solution toolbox materials. For each breakout session, the group will first discuss the materials for the session. Second, the group will identify the key financial assumptions and logical relationships. Third, the group will weigh the pros and cons of potential solutions and assess their viability and rank them using the following three criteria:

- 1. Financial sustainability: Will the private sector invest in this solution?
- 2. **Ease of implementation**: Is this solution actionable today with current technology and market conditions?
- 3. Replicability: Can this solution be implemented in more than one location?

Finally, the group will report out their findings during the final 5-10 minutes of each breakout session.

11:15 a.m.	Breakout 1: Interregional Charging Gaps	
	Interregional travel in Washington state is currently difficult for battery electric vehicles (BEVs) because	
	of a lack of DC fast charging along major corridors. Breakout groups will use the results of a trip	
	simulation from Seattle to Spokane to discuss this challenge and possible solutions.	
12:00 p.m.	Lunch	
12:30 p.m.	Breakout 2: Urban Public Charging Gaps	
	Access to charging in urban areas may be limited because of a large ratio of EVs to publicly available	
	charging locations. Breakout groups will use data on EVs and charging locations in the Seattle metro	
	region to discuss this challenge and identify possible solutions.	
1:15 p.m.	Breakout 3: Destination Charging Gaps	
	BEVs are currently unable to reach destinations along the Pacific Coast because of a lack of charging	
	along key routes. Breakout groups will use the results of a trip simulation from Olympia to Port Angeles	
	to discuss this challenge and identify possible solutions.	
2:00 p.m.	Break	
2:15 p.m.	Summary, Discussion and Next Steps	
	Nick Nigro, C2ES	
	C2ES will summarize key takeaways from the day including the most favored potential solutions for each	
	charging gap. Participants will be encouraged to share their own conclusions.	
3:00 p.m.	Adjourn	

Washington State Advisory Panel

NAME	ORGANIZATION
Wayne Amondson	Cowlitz County Public Utility District
Rep. Judy Clibborn	Joint Transportation Committee Co-Chair
Scott DeWees	Western Washington Clean Cities
Tonia Buell	Washington State Department of Transportation
Ben Farrow	Puget Sound Energy
Rep. Jake Fey	House Transportation Committee Member
Stephen Johnsen	Seattle Electric Vehicle Association (SEVA)
Ron Johnston-Rodriguez	North Central Washington Plug-In Center
Charles Knutson	Governor's Policy Office
Rep. Drew MacEwen	House Republican Caucus Member
Rep. Chad Magendanz	House Republican Caucus Member
Sen. Mark Mullet	Senate Transportation Committee Member
Rep. Dick Muri	House Transportation Committee Member
Rep. Ed Orcutt	Joint Transportation Committee Member
David Peterson	Nissan North America, EV Regional Manager, Marketing & Sales Strategy
Sandra Pinto de Bader	City of Seattle Office of Sustainability
Colleen Quinn	ChargePoint
Glen Stancil	NRG Energy EV Services eVgo