

Electric Vehicle Readiness **City of Seattle**

Plug-in Ready Interdepartmental Team
Briefing for the

Energy & Environment Committee

June 25, 2013

IDT's WORK PLAN

- Develop consumer information – DPD, SCL, SDOT, OSE
- Streamline charging station permitting process – DPD, SCL, SDOT
- Upgrade service connections and potential distribution system overload (clustering) – SCL, DPD
- Public charging station pilot program – FAS, S. Center, SPL, OSE
- Equitable access for all (including 'garage orphan EVs') – OSE



Installation of Electric Vehicle (EV) Charger for Single Family and Multifamily Homes

Things to Consider

Before purchasing an electric vehicle evaluate the adequacy of the electric residence. We recommend using a S licensed and bonded electrical contr your electrical system. The Departme and Development (DPD) has develop assessment form for EV capacity. Thi



CHARGING INFRASTRUCTURE - FUNDING

- EV Project – Nissan/ECOtality – ARRA grant – funding charging stations on private property in the Puget Sound region
- Western Washington Clean Cities funding for charging stations in public property

The logo for 'THE EV Project' features the word 'THE' in small blue letters above a stylized 'EV' icon. The 'E' is a black arrow pointing right, and the 'V' is a black shape. To the right, the word 'Project' is written in a large, blue, sans-serif font.The logo for 'ecotality NORTH AMERICA' features the word 'ecotality' in a lowercase, sans-serif font. The 'e' is green, 'c' is yellow, and 'o' is blue. Below it, 'NORTH AMERICA' is written in a smaller, black, uppercase font.The logo for 'Western WA CLEAN CITIES' features a stylized green map of Washington state on the left. To the right, the text 'Western WA' is in green, and 'CLEAN CITIES' is in a large, blue, uppercase font.The logo for the U.S. Department of Energy, featuring the text 'U.S. DEPARTMENT OF ENERGY' in white, uppercase letters on a dark blue background.The text 'Energy Efficiency & Renewable Energy' in white, sans-serif font, positioned to the right of a vertical line on a dark blue background.

CHARGING INFRASTRUCTURE - TYPES

- Home Charging
 - Over 200 private Level II charging stations a.k.a. EVSE – EV supply equipment (EV Project)
- Public Access Network
 - Over 100 public Level II and three DC/Fast Charge (EV Project)
 - 20 public Level II charging stations in public property, e.g. City Hall, Seattle Center, Library, Pacific Place (WW Clean Cities)
- Fleets Charging
 - 46 charging stations (26 in SMT, 20 on field locations) (WW Clean Cities)



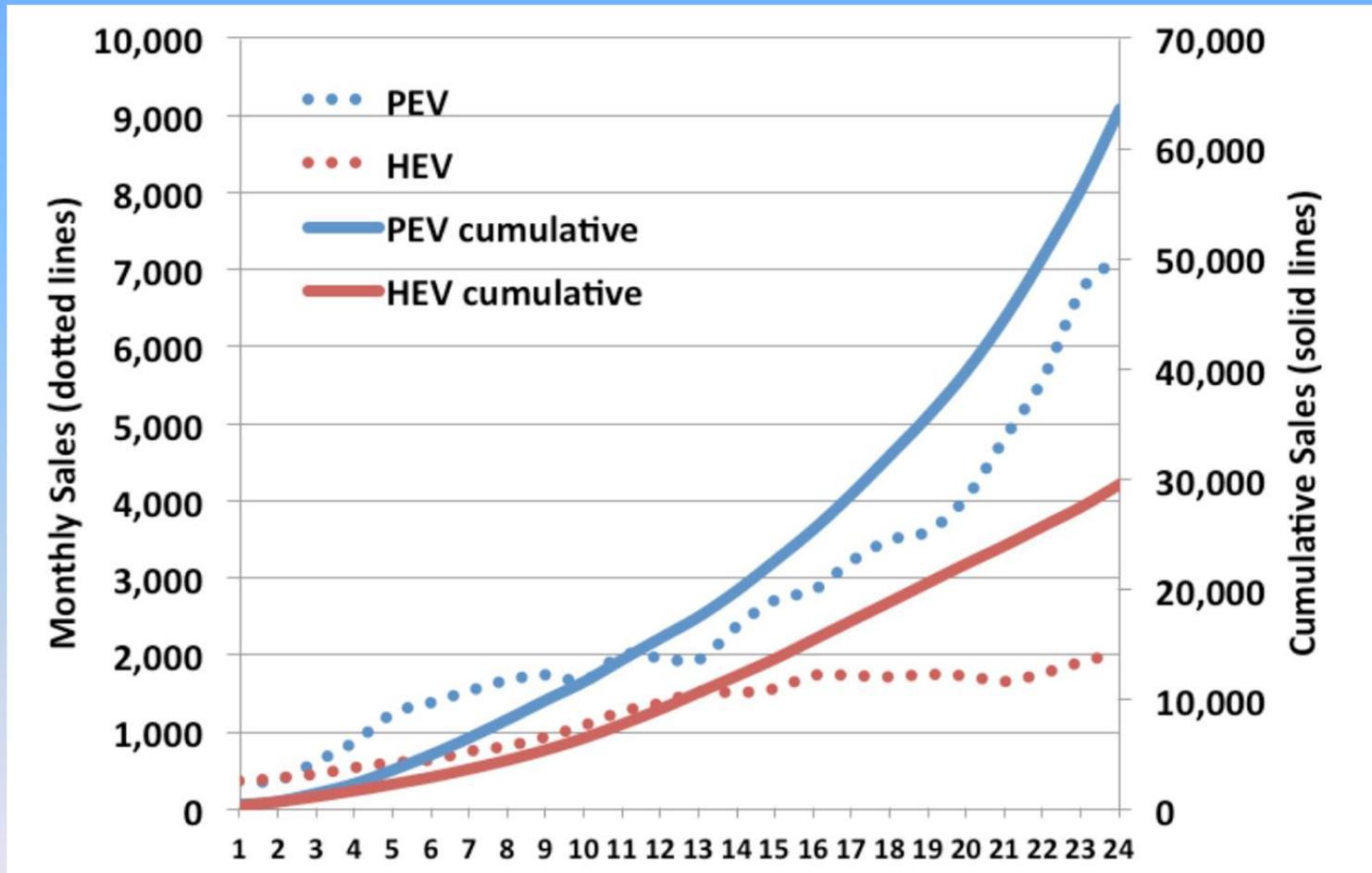
ELECTRIC VEHICLES & EVSE - THE NUMBERS

- EV Project
 - WA State 2nd in the US with 1,044 EVs and 3rd with 1,464 EVSE
- DPD Permits
 - 767 permit applications to date (223 commercial, 544 residential)
- Seattle City Light Territory
 - Over 1,400 vehicles registered
- City of Seattle's Fleet
 - 44 Nissan Leafs (27- Motor Pool, 8-SCL, 1-Parks, 5-DPD, 2-SPU, 1-PEO)



ELECTRIC VEHICLES - RATE OF ADOPTION

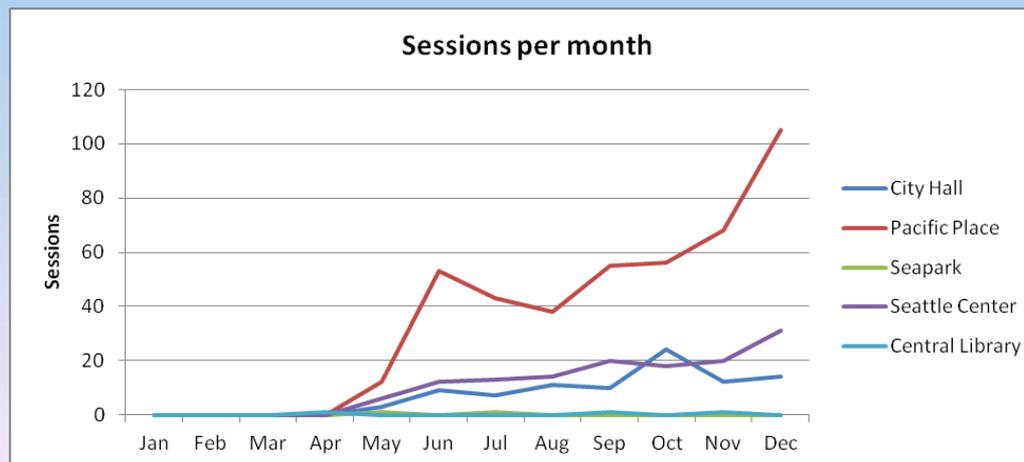
PEV sales compared to HEV sales over their respective 24 introductory periods



PEV sales 12/2010 through 11/2012, HEV sales 12/1999 through 11/2001

PILOT PROGRAM

- Year 1 (2011) – Gearing up (contracts, legislation, usage fees)
- Year 2 (2012) – Implementation (installations, data gathering, marketing)
- Year 3 (2013) – Completion & Recommendations
 - Address program issues
 - Re-assign SeaPark stations to City fleet
 - Continue charging \$2.00/session



NEXT STEPS

- Equitable access to charging infrastructure
 - “Garage orphan” EVs (Old housing stock, and multi-family)
 - The Right-of-Way issue
 - Solutions (neighborhood level, PPPs, fast-charging)
- Green Fleets Plan update
- Public EVSE Pilot program wrap-up



QUESTIONS?

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