

Electric Vehicle Infrastructure in the MAG Region

Zero Emission Partnership Update

MAG Building Codes Committee

August 19, 2009

History

- **April 16, 2009** - MAG, ECOtality and Nissan North America announced a zero emissions partnership that will help facilitate the introduction of electric vehicles (EVs) in the MAG region.
- **May 20, 2009** - MAG staff provided an update on the zero emission partnership initiative to the MAG Building Codes Committee.

History

- **August 5, 2009** - Electric Transportation Engineering Corporation (eTec), a subsidiary of ECOtality, Inc., a leader in clean electric transportation and storage technologies, was selected by the U.S. Department of Energy for a grant of approximately \$99.8 million.
 - Largest deployment of EVs and charging infrastructure to date
 - Matched by application's project participants to provide a total of approximately \$200 million

Electric Vehicle Infrastructure Initiative

- The eTec initiative proposes to deploy charging infrastructure in major population areas that include Phoenix (AZ), Tucson (AZ), San Diego (CA), Portland (OR), Eugene (OR), Salem (OR), Corvallis (OR), Seattle (WA), Nashville (TN), Knoxville (TN), and Chattanooga (TN).

Arizona

- Phoenix (MAG region)
- Tucson (PAG region)
- I-10 Corridor
 - Strategic fast-charge stations along Interstate-10 to create the first true implementation of an EV Corridor in North America

**Electric Vehicle Infrastructure
Policy and Building Code
Regulation Efforts**

Oregon

- House Bill 2186 (Climate Change Bill)
- Charging Equipment eligible for a 35 percent tax credit through Oregon Department of Energy
- Building Codes Division, Department of Consumer and Business Services, State of Oregon
 - **September 26, 2008** - Notice of Temporary Rule
- Oregon Department of Transportation
 - Development of Installation Manual for the individual consumer, business owner, or government representative

Washington

- House Bill 1481 - Collaborative planning efforts include:
 - Developing short-term and long-term plans outlining how state, regional, and local governments may construct EV charging locations and ensure that the infrastructure can be electrically supported;
 - Supporting public education and training programs on EVs;
 - Developing an implementation plan for counties with a population greater than 500,000 to have 10% of public and private parking spaces ready for EV charging by December 31, 2018; and
 - Developing model ordinances and guidance for local governments for site assessment and installing EV infrastructure

Washington

- Public lands used for installing, maintaining, and operating EV infrastructure are exempt from leasehold excise taxes until January 1, 2020.
 - State sales and use taxes do not apply to EV batteries; labor and services for installing, repairing, altering, or improving EV batteries and EV infrastructure; and the sale of property on land used for EV infrastructure

Washington

- **Local Government Electric Vehicle (EV) Charging Infrastructure Requirements**

A jurisdiction meeting specific location criteria (as defined in Revised Code of Washington 35.63) must develop regulations to allow the use of EV charging infrastructure in all areas except critical areas or areas zoned for residential or resource use. These regulations must be developed six months after the **Washington Department of Community, Trade, and Economic Development** distributes model ordinances, development regulations, and guidance for local governments for site assessment and installing EV infrastructure, or by July 1, 2010, whichever is later. This requirement is contingent upon federal funding. Additionally, cities or municipalities are authorized to adopt incentive programs to encourage retrofitting of existing structures capable of charging EVs. (Reference House Bill 1481, 2009, and Revised Code of Washington 35.63, 35A.63, 36.70, and 36.70A)

Vancouver

- **March 2005** – City of Vancouver Community Climate Change Action Plan
- **January 2007** – Council approved membership in Plug-in Partners
- **June 2008** – Council adopted the Green Homes Program, which included a requirement within the Building By-law to require provisions for Plug-in Electric Vehicle (EV) charging infrastructure in all new one and two family dwellings

Vancouver

- **July 2009** – Council adopted the following recommendations:
 - Providing EV charging infrastructure for 10% of parking stalls in new multi-family buildings, at the initial stage, along with a process by which this requirement could be adapted in future phases
 - A public charging pilot at a number of publicly available parking locations
 - Developing a strategy to provide incentives for the retrofits of existing buildings with charging infrastructure

Vancouver

- City of Vancouver is working to expand upon Building By-law 9691 for Green Homes Program and develop requirements to accommodate overall electric vehicle infrastructure charging.

Next Steps

- **September 2009** – Staff from ECOtality and eTec will present action plan for implementation of electric vehicle infrastructure initiative.
- **GOAL** - Develop a set of building code regulations for electric vehicle infrastructure for residential, commercial and public space use for the MAG region for adoption by the MAG Regional Council by Spring 2010 (February/March) in preparation for private infrastructure installation in June 2010.

Discussion